WORK PRO

INSTALLER'S GUIDE 2011

We make your projects come true

In the last few years, the development of **WORK** audio products for the installation and integration business has experienced a significant increase. Many resources have been allocated to the R&D team in order to design innovative audio products. At the same time, the overall installation sector has constantly grown, without being affected by external factors such as the economy.

Today, **WORK** releases this new catalogue, specially dedicated to audio installations. Integrators will find in the following pages relevant solutions for their projects. Some of the products shown in this catalogue have already reached great success in international trade shows, being awarded for their innovative natures. An example is the IC 6 Pro A, a self-powered and remote controlled ceiling speaker, which received the 2010 Innavation Award for the most innovative commercial audio speaker and which was finalist at the Plasa Awards. Another outstanding solution is the BlueLine system, the first multichannel commercial audio system that only uses cat5 cables (also finalist of the technology Innavation Awards and Plasa Awards).

The use of **WORK** audio products is a well thought out decision: we focus on providing solutions for your different commercial audio applications, innovating to make integrators job easier and faster.

WORK® PRO

neo
SERIES

4

INDEX

04 ..... MULTICHANNEL AND MULTIZONE AUDIO SYSTEM

08 ..... DIGITAL AUDIO MATRICES

12 ..... INSTALLED SOUND AMPLIFIERS

23 ..... POWER AMPLIFIER

28 ..... ULTRA COMPACT AMPLIFIERS

30 ..... AUDIO CONTROLLER AND AMPLIFIERS

32 ..... AUDIO TOOLS

38 ..... AUDIO MIXERS

45 ..... PORTABLE SYSTEMS

46 ..... LOUDSPEAKERS

56 ..... MICROPHONES

60 ..... MICROPHONE BASES AND STANDS

62 ..... CEILING SPEAKERS

70 ..... VOLUME CONTROLLERS

72 ..... SOUND PROJECTORS

76 ..... HORN SPEAKERS

79 ..... COMPRESSION MOTORS

80 ..... COLUMN SPEAKERS

82 ..... PRODUCTS INDEX

BlueLine SYSTEM

Sistema multicanal de audio distribuido

BlueLine system is the last innovation of WORK® for remote audio control. It allows designing a multichannel and multizone installation easily and in a very short time.

The cleverness of the BlueLine system lies in its simplicity, because it can be controlled through RS 485 and RS 232, and also because it only uses Cat5 cables to connect ALL the elements of the installation.

Much more than a multichannel system.

With BlueLine system, WORK presents a new solution for audio control. It offers much more than a multi-channel system, with features such as:

- the selection of different sources to different zones,
- the individual control the volume of each speaker,
- the control of the entire system via RS 485 or RS 232,
- and all through a single, reliable and economical Cat5 cable.

Easy as A.B.C.

You don't have anything to learn to know how to install BlueLine system. Engineers of WORK have designed this "PlugandPlay" system to be as simple as possible: that's why connection is so easy. In addition, thanks to the UTP cable, there is no need to use colour for cables, because all the information is sent through a unique cable.

Installation in a very short time.

Audio channels and control signal use the same Cat5 cable. The latter is well-known by installers: it is reliable and economical. Connecting devices to the network is instantaneous so it allows saving considerable time.

Optimized remote control.

Control through RS 232 and RS 485 is probably one of the most interesting features of BlueLine. It makes possible the remote control of any speaker in an installation and of audio sources played on each zone, integrating itself with the largest control systems and ensuring optimum compatibility with the different devices of the market. BlueLine can be controlled through these protocols using the most common control systems of the market.

An alternative is the use of the sofware Zone Manager, an intuitive software which makes possible the control of audio from a unique PC (using the BlueLine network).

Local control in each zone.

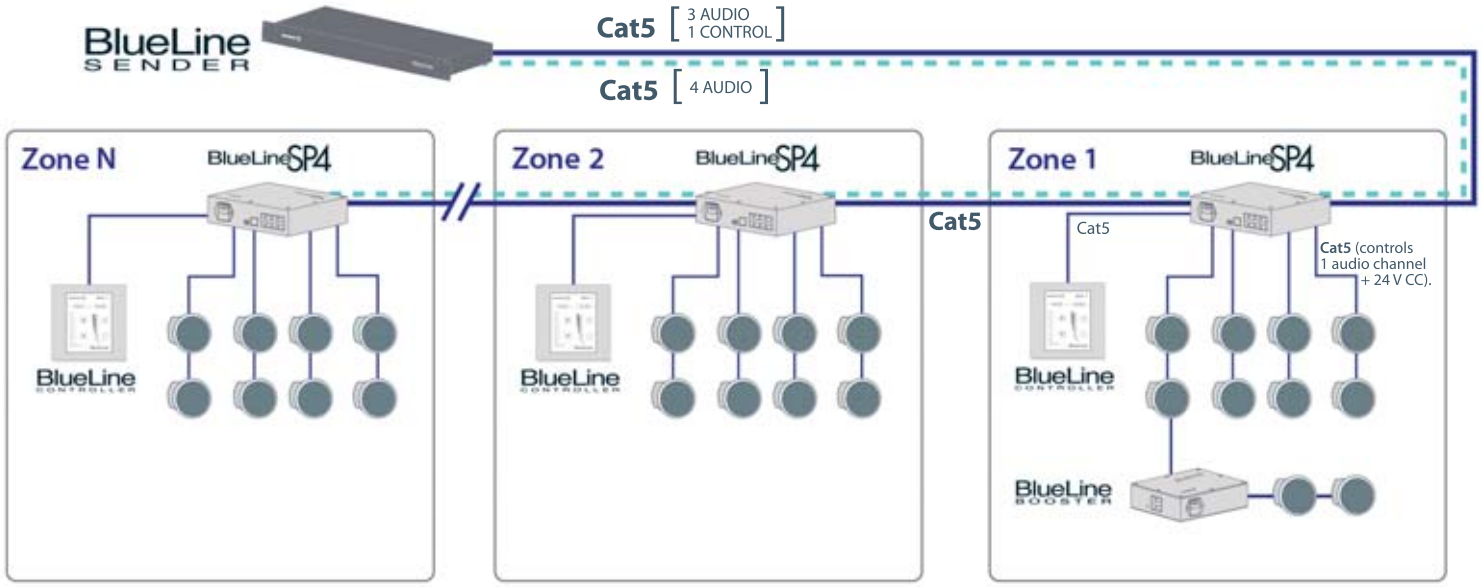
Another advantage of BlueLine is the possibility to install in each zone a local controller. This allows selecting audio source and controlling volume, independently from the other parts of the installation.

Each zone features an additional audio input, being particularly interesting for voice applications.

Maximum safety and energy saving.

The integrated alarm system with priority over any audio source ensures maximum safety in all the installation (alarm signal can be sent from each part of the installation). In order to save energy, each ceiling speaker can be remotely turned on and turned off.

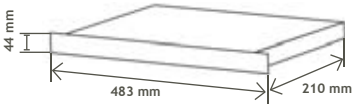
Imagine a multichannel, distributed audio system that only uses Cat5 cables.



An adequate system for each size of installation.
From a simple restaurant with several rooms to the most important hotels, any place will take advantage of the BlueLine system. Its easy mounting system, reliability and control capability are relevant features for users. Up to 256 zones can be controlled independently and from a unique place.

BlueLine SYSTEM

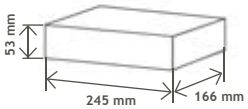
BlueLine SENDER



This is the first device of the system. All the audio sources are connected to it, as well as the RS 232 or RS 485 control system. One or two Cat5 cables (depending on audio channel quantity) are used to send audio channels and control signal to all the installation. There is no other kind of cables than Cat5 in the overall installation.

- Up to 7 inputs available for audio sources.
- General alarm system input.
- RJ45 output cable that transports 4 audio channels + DMX.
- Possibility to connect another RJ45 output cable to transport other 4 channels.
- Full control of the alarm signal for the whole installation.

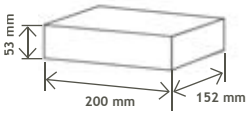
BlueLine SP4



BlueLine SP4 is the device that receives signals coming from BlueLine Sender or from another zone. User selects the audio channel that has to be played in the zone, so each speaker receives this audio source, supply and control signal. Each speaker can be controlled independently.

- 8 RJ45 outputs to supply and send audio sources to 8 **IC 6 Pro A** speakers.
- Input for the alarm system.
- Additional RJ45 input for the remote control (BlueLine Controller).

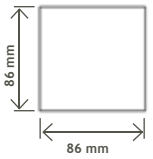
BlueLine BOOSTER



BlueLine Booster increases the number of speakers in each zone, and rebuilds audio signal.

- To rebuild audio signal.
- Allows using up to 8 ceiling speakers per output (instead of 4).

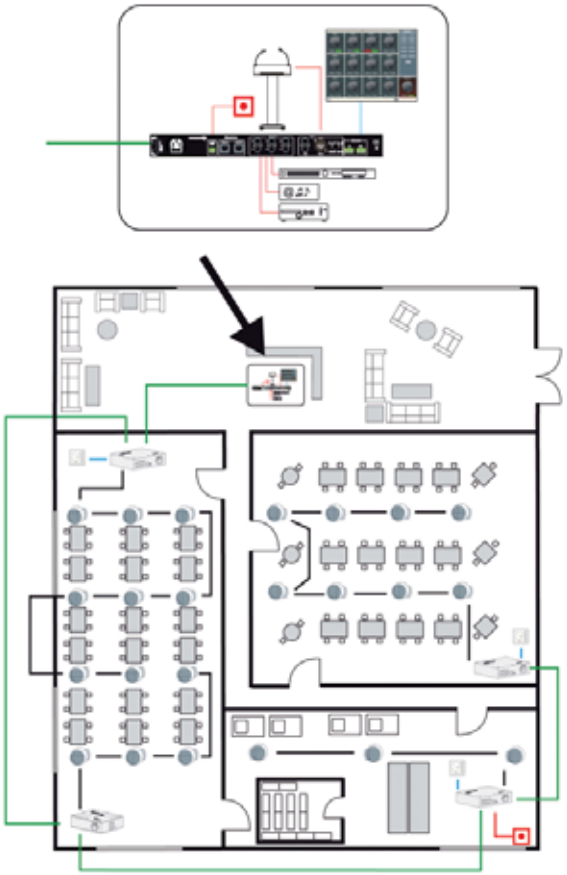
BlueLine CONTROLLER



By using **BlueLine Controller** in each zone, final user can locally select one of the 8 audio sources available (7 channels in the network + 1 local channel) and control general volume in the zone.

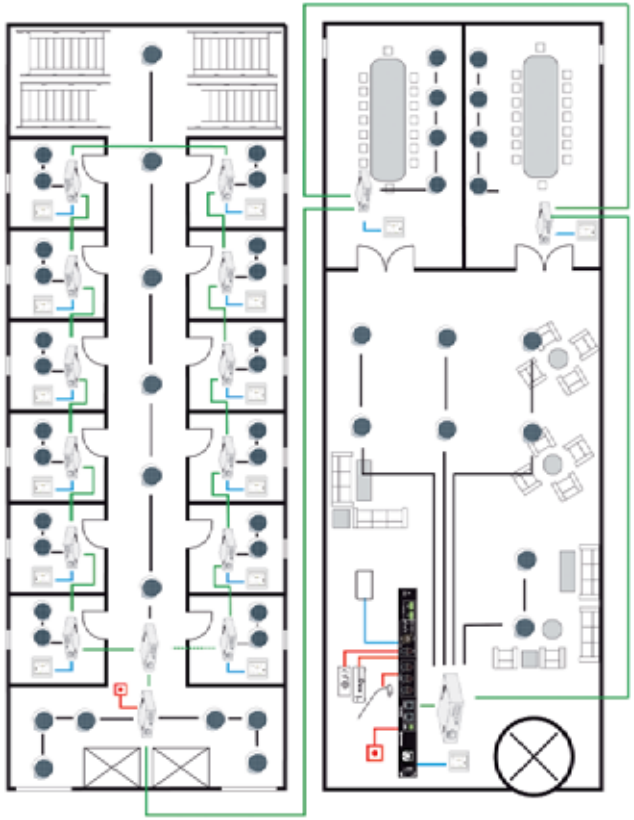
- Allows to locally choose between 8 input audio sources.
- Additional input (Mini-Jack) for the connection of a personal audio player.
- Volume and On/Off control of the speakers.

Example of installation: A restaurant with two zones, reception and kitchen (3 audio channels).



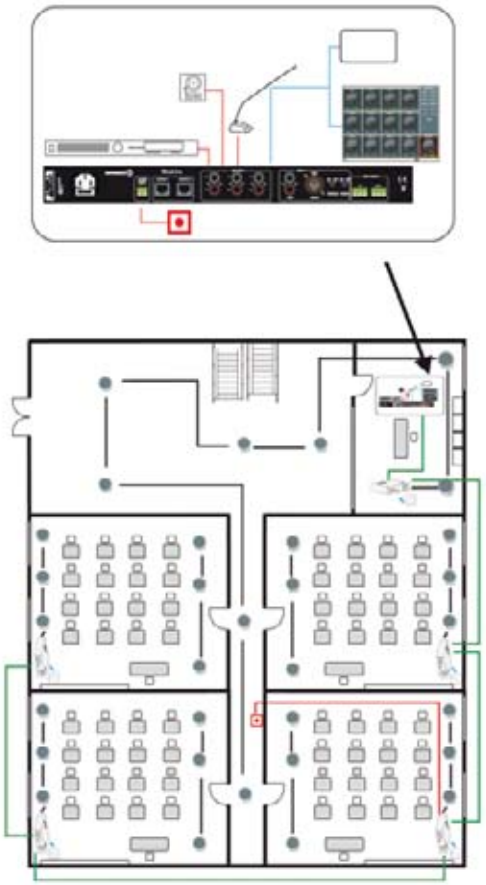
In this example a microphone channel is used in reception to send messages to the different zones (call people waiting at the reception, send a message to the kitchen, tell customers that a car is not correctly parked, etc.). At the reception audio channel volume is loader than in the other parts of the restaurants. In the kitchen cookers and waiters can only ear messages. Everything is controlled with the software Zone Manager or with a third party RS232/RS485 controller.

Example of installation: An hotel with reception and several floors with rooms (7 audio channels + control).



In this example the reception plays an audio channel at a determined volume whereas in the other parts of the same floor only messages are sent. In the other floors there is other background music with a lower volume. Emergency messages are sent in each room. Users can listen to one of the 7 audio channels or connect their personal audio player to the Mini-Jack input available in each room.

Example of installation: College with many zones (3 audio channels + control).



In this example an audio channel is used for general audio messages, another for background music and a last one for emergency messages. Using a RS232/485 controller or the software Zone Manager, it is possible to select audio channel for each classroom or zone, independently of each other. The emergency system can be triggered in any zone. Once triggered, the emergency channel is automatically selected.

Digiline series

Multizone Digital mixers with signal processing to make the integration simple

Today it is essential to speed up installations with “easy to learn and install” solutions which are at the same time powerful enough for project requirement. With Digiline series, WORK offers a new solution for audio control, easy to set up and perfectly adequate to small/medium size installations. The main features for the series are:

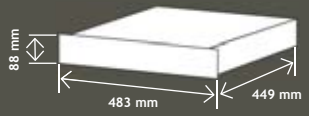
- Digital matrix mixer of 8 double inputs and 8 outputs,
- Independent digital processing for each output,
- TCP/IP device control managing all the Digiline units from the same computer,
- 8 x 150 W power amplifier (only for Digiline 8).

Digiline series brings the power of digital mixing to small multizone installations integrating independent DSP processing for each output. Thanks to the new software **WorkCAD Designer**, it is possible to control any Digiline units included in an Ethernet network from a unique computer.

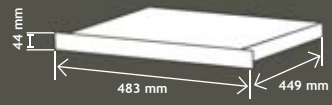
Their GPI (General Purpose Input) interface allows triggering any function (configured through software) from a simple wall-mount switch. Users can configure the independent signal processing of each channel with parameters like Crossover, Equalizer and Dynamics. They are all adequate for facilities like business offices, restaurants, small shopping centres, etc.

Composed of two devices, the Digiline series provides an adequate solution for any installation requirements. Digiline 8 features a class-D advanced amplifier system with a switching mode power supply.

DIGILINE 8



DIGILINE MX



Features

- Digital matrix mixer of 8 x 8 (each input is composed of 2 inputs: 1 Mic and 1 Line).
- Independent processing of signal for each output.
- Controllable through TCP/IP protocol, in order to control from a unique computer all the units connected to an Ethernet network.
- Third party controllers can be connected to control Digiline by TCP/IP and RS232 (RS232 only available in Digiline MX).
- Additional programmable Mic input.
- All inputs are phantom powered.
- Powerful software WorkCAD Designer for Digiline connection through TCP/IP.
- GPI triggering mode to launch actions, presets, etc from a simple controller.
- Only for Digiline 8: Built-in power amplifier (8 x 150 W RMS).

Rear panel

Digiline 8

Digiline 8 is the most complete unit: in addition to processing features, it includes a powerful amplifier with 8 independent channels of 150 W each.
To maximize S/N ratio in audio signal, it features a double switching mode power supply: one for amplification and another for DSP. It has a small size (2 HU 19” rack units) and ensures maximum efficiency, thanks to the class-D advanced amplifier system associated with a switching mode power supply.

8 channels but 16 inputs:
Each input is a double one: 1 Line + 1 Mic for Phantom powered microphone. Both inputs are balanced and summed in a same channel, providing 16 inputs possibilities distributed in 8 input channels.

RS 232 port (only for Digiline MX).
Digiline MX features a RS232 port in order to receive ASCII orders from any device that uses this protocol. Thus, it is possible to program automatic actions like preset changes, mute for all channel except one, etc.

Optimum control through Ethernet.
Thanks to the advanced TCP/IP control system, these powerful networked units can be remotely controlled from the same computer and at the same time. It is possible to use an Ethernet controller for all the parameters of Digiline units but also admits ASCII orders by TCP/IP being able to be managed by third party controllers

Digital signal processing on each output:
The engine system of Digiline MX and 8 includes a complete digital signal processing on each output, featuring Crossover, Equalizer and Dynamics (all fully adjustable) with curve visualization.

GPI triggering (easy remote control):
In addition to traditional inputs, 12 GPI inputs (4 GPI in the Digiline 8) with TTL level (DC 0-5 V) are available to launch preset from a simple controller. Users can program several actions on the Digiline depending on contacts state. For example, it is possible to set up alarm parameters (e.g. select Mic. inputs only, no equalizer, max output) and to launch this preset with a potentiometer. Thanks to the monitoring system, Digiline detects if contacts are closed or opened (these inputs can be used for output configurations with Digiline MX).

Programmable Mic input.
An additional Mic input detects the acoustic level of the installation. Users can set up actions to be launched depending on acoustic level. For example, it is possible to set up an action which increases volume output when acoustic level is exceeded.

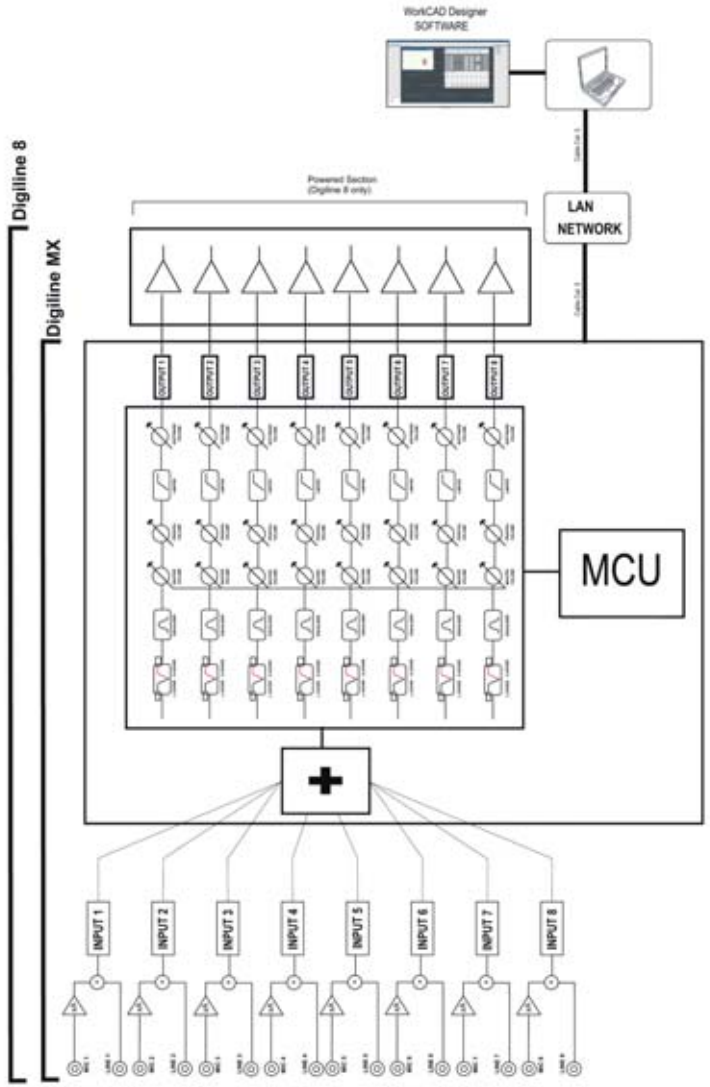
Rear panel

Digiline MX

Digiline MX for its own is exclusively dedicated to processing uses. In only 1 HU 19" rack unit, it is a very interesting alternative for those who already have a power amplifier or for others who need more power at the outputs. Its useful RS232 port allows receiving ASCII orders. Thus, it is possible to program automatic actions like preset changes, mute for all channel except one, etc. It also features 12 GPI inputs (against 4 GPI inputs for Digiline 8), providing further configuration possibilities.

Digiline series

Block diagram.



Technical data Digiline series.

General (common to both units):

Control:	TCP/IP networking.
Inputs:	16 balanced inputs (8 Mic with Phantom + 8 Line); level measurement input (LMI).
Connectors:	Euroblock type input and output connectors.
Memory:	10 presets for memory storage.
Software:	WorkCAD Designer (fully compatible).

General (only for Digiline 8):

Front output:	gain control.
Inputs/outputs:	4 GPI (normally open TTL inputs) for direct control.
Main supply:	AC 120 or 230 V (internally selectable).
Power requirement:	800 W.
Dimensions:	483 x 88 x 449 mm.

General (only for Digiline MX):

RS 232 command control capability.	
Inputs/outputs:	12 GPI (TTL inputs or outputs software selectable) for direct control.
Mic input:	20 dB PAD each.
LED indicators:	Signal present, input clipping and output clipping.
Main supply:	AC 90 - 264 V (automatic).
Power requirement:	50 W.
Input sensitivity:	1.22 V / 4 dBu (with unselected PAD).
Frequency response:	20 Hz - 20 kHz.
Dimensions:	483 x 44 x 449 mm.

Processing (common to both units):

Output channel volume control:	selectable by software and frontal potentiometer (36 dB to -109 dB range). 48 bit processing architecture with 76 bits of precision for most audio processing features.
Filters:	7 BIQUAD filters per output for crossover and EQ purposes. DC blocking filters.
Types:	Bessel, Chebyshev, Linkwitz-Riley, Butterworth and Custom.
Output controls:	Limit and compression adjustments.
Description:	Full 8x8 input crossbar mixer (each signal processing channel input can be any ratio of the 8 input channels).
PWM architecture:	32 bit processing, with 40 bits of precision.
Oversampling:	8 x Oversampling with fifth order noise shaping @ 32-48 kHz; 4 x Oversampling @ 88.2 and 96 kHz; 2 x Oversampling @ 176.2 kHz and 192 kHz.
THD+N:	< 0.1 %.
Digital De-emphasis:	for 32, 44.1 and 48 kHz data rates.

Amplification (only for Digiline 8):

Type:	High efficiency Class D topology.
Dynamic range:	110 dB.
THD (100 W), 1 kHz:	<0.05 %.
Frequency response:	20-20 kHz.
Output power:	8 x 150 W.
Modulation frequency:	195 to 430 kHz.

WorkCAD Designer, the new software for digital audio control and processing.

What is WorkCAD Designer?

WorkCAD Designer is the sofware of WORK® designed to manage audio through TCP/IP and USB. It is suitable for many devides like the Digiline series and allows the independent control of each unit.

WorkCAD Designer in action.

The exclusive design of WorkCAD Designer provides great benefits for users. Units connected through Ethernet are visualized in a unique computer: users can create a schematic visualization of the installation which is very useful to have a general view and understanding of the installation design. User can group devices in projects (each one with different zones) and name inputs and outputs, taking advantage of an intuitive management and visualization of the overall installation. It is also possible to select a device and edit its parameters (e.g. IP address, name, preset, filters, etc.).
Programming operations can be done online and offline. Changes are instantaneously saved when WorkCAD Designer is connected. On the contrary user can use the offline mode to prepare and save a show without affecting current process.

Opening doors for future innovations.

Day after day, engineers of WORK team design new products and improve existing ones. For this reason, WorkCAD Designer software makes possible the integration in the same interface of all the devices of the brand, even those which will come to the market in the future. And because it is free, anyone can get and use the latest versions.

Firmware updating from the software.

Improvements not only concern the software but rather any devices. Indeed, WorkCAD Designer is able to find firmware updates online and so to upgrade the device firmware. It ensures maximum reliability and compatibility of WORK devices with next systems coming out.

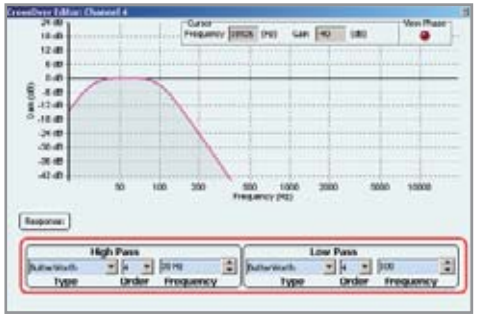
The sotfware for digital processing and audio control.

WorkCAD Designer is the ultimate software designed by WORK to control devices of the brand connected by Ethernet. It creates a virtual version of each unit and it generates an interface for the control of its specific parameters. Using it with Digiline units, users can edit all the following parameters:

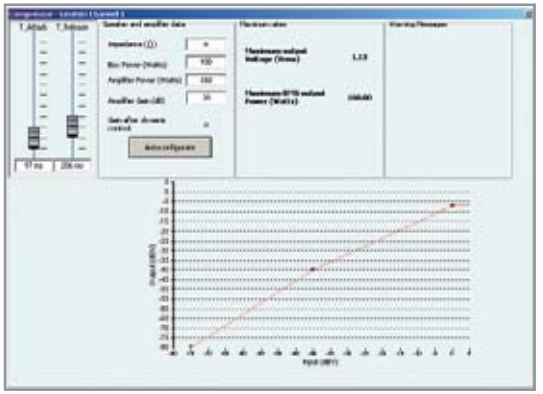
- Control of presets (both visualization and execution).
- Control of the input matrix (8x8) with balance of each input. It is possible to edit the input level to be sent at each output.
- Control of output channel volume (36 dB to -109 dB) as well as Master volume.
- Crossover and equalization with seven BIQUAD filters independently configurable.
- Bessel, Linkwitz-Riley and Butterworth types.
- Adjustment of limitation and compression for the outputs.
- Name edition for inputs and outputs.

Min screen for WorkCAD Designer configuration.

Equalizer.



Crossover set-up.



Limiter configuration.

PA 60/2
PA 120/2 Pro

Installed sound amplifiers

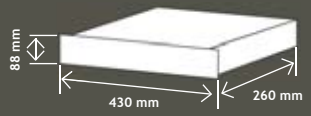
PA 60/2 and **PA 120/2 Pro** are installed sound amplifiers with built-in mixer. Depending on the model, they feature 5 or 6 signal inputs with their own gain control, Master volume and high/low tone controls.

PA 60/2 is suitable for low impedance speakers (8 Ω) and high impedance loads (25/70/100 V). **PA 120/2 Pro** differentiates itseft from the other model with its two different outputs: Music/Speech and Priority only.

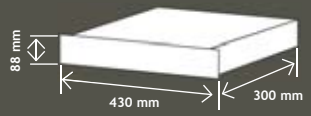
For maximum safety, they both includes a Chime On/Off switch, Tel/Emer connection for emergency announcements and 24 V dc terminals are also available for emergency backup.

Rear panels

PA 60/2



PA 120/2 Pro



Features

- Installed sound amplifiers with built-in mixer.
- 5 or 6 signal inputs depending on model, with individual gain control, Master volume and high/low tone controls.
- Suitable for low impedance speakers (8 ohm) and 25/70/100 V Line installations.
- Only PA 120/2 Pro: two different outputs (Music speech and Priority only).
- Telephone/Emergency connection for paging and announcements.
- Terminals for emergency supply (DC 24 V).
- 2 HU rack enlosures.

Technical data	PA 60/2	PA 120/2 Pro
Output Power (RMS):	60 W.	120 W.
Output Power (Peak):	90 W.	180 W.
Audio inputs:	3 MIC, 1 LINE, 2 AUX level.	4 MIC, 1 CD, 1 AUX level.
MIC inputs (Impedance/Sensitivity):	250 Ω / 1 mV / -57.78 dBu.	250 Ω / 1 mV / -57.78 dBu.
LINE (Impedance/Sensitivity):	47 kΩ / 200 mV / -11.76 dBu.	47 kΩ / 100 mV / -17.78 dBu.
CD (Impedance/Sensitivity):	----------	47 kΩ / 500 mV / -3.80 dBu.
AUX (Impedance/Sensitivity):	47 kΩ / 200 mV / -11.76 dBu.	47 kΩ / 200 mV / -11.76 dBu.
Power IN (Impedance/Sensitivity):	47 kΩ / 1 V / 2.21 dBu.	47 kΩ / 1 V / 2.21 dBu.
Low Impedance Output:	8 Ω.	----------
High Impedance Line Output:	25 / 70 / 100 V.	----------
Music/Speech Output:	----------	8 Ω / 100 V.
Speech only Output:	----------	100 V.
Tape:	4k7 Ω / 350 mV.	4k7 Ω / 350 mV.
Pre-out:	600 Ω / 1 V.	600 Ω / 1V.
Monitor:	----------	8 Ω/1 W - 600 Ω / 1 V.
Frequency Response:	50 Hz - 20 kHz +/- 3 dB.	50 Hz - 20 kHz +/- 3 dB.
EQ Control:		
Bass:	(+/- 10 dB) / 31 Hz - 180 Hz / Centre freq. 100 Hz.	(+/- 10 dB) / 31 Hz - 180 Hz / Centre freq. 100 Hz.
Treble:	(+/- 10 dB) / 2k5 Hz - 20 kHz / Centre freq. 10 kHz.	(+/- 10 dB) / 2k5 Hz - 20 kHz / Centre freq. 10 kHz.
S/N Ratio:	>75 dB (Line), >60dB (MIC).	>80 dB (Line), >60 dB (MIC).
THD:	Less than 1% at 1 kHz, rated power.	Less than 1% at 1 kHz, rated power.
Chime:	2 tone chime ('Ding-dong' pre-announcement chime).	2 tone chime ('Ding-dong' pre-announcement chime).
Priority:	Tel./Emer. - MIC1.	Tel./Emer. - MIC1-MIC2-MIC3-MIC4-AUX/CD-USB/SD.
Main supply AC Power:	115 / 230 V - 50 / 60 Hz.	115 / 230 V - 50 / 60 Hz.
Main supply DC Power:	24 V - 8 A.	24 V - 8 A.
Consumption:	170 W.	260 W.
Dimensions:	430 x 88 x 260 mm.	430 x 88 x 300 mm.
Weight:	8 kg.	10 kg.

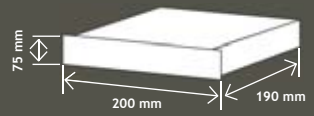
PA 40/2 USB

Public address amplifier

This relevant mixer/amplifier is the evolution of the PA 40 model. It includes a solid state USB/SD MP3 player and two microphone inputs, being a perfect solution to many small size installations like warehouse and car parks. Thanks to the DC 12 V input, it is also possible to connect batteries and use it to make announcements from a car.

Small size installations will take advantage of this very complete device: users can directly connect storage devices with up to 32 GB memory to the built-in solid state audio player and so play thousands of tracks. An auxiliar input is also available for CD or tuner connection. The player includes all the functions required for its control: play/rewind/forward, volume, etc.

PA 40/2 USB is mainly designed for public address applications, that is why Mic 1 input can be used as a priority channel. It is also suitable for low impedance speakers (4, 8, 16 Ω) and 100 V Line installations. Additionally, it features a preamp output with all the signals mixed together. This is a great solution for users who need to connect equalizers or additional power amplifiers in the installation.



Features

- 15W power amplifier with mixer.
- 2 microphone inputs with gain control.
- 1 auxiliar line input with gain control.
- 1 tone (Bass/Treble) control.
- 1 priority channel available (Mic input 1).
- Built-in solid state player with USB and SD inputs.
- Audio player is suitable for external solid state devices with up to 32 GB memory.
- Plays any MP3 and WMA files.
- PRE OUT output available.
- Direct AMP input available.
- Suitable for low impedance speakers (4, 8, 16 Ω) and 100 V Line installations.

Rear panel

Technical data	PA 40/2 USB
Output Power (RMS):	15 W.
Output Power (Peak):	30 W.
Audio inputs:	2 MIC, 1 AUX level.
USB/SD interface:	MP3/WMA formats.
MIC inputs (Impedance/Sensitivity):	250 Ω / 1.1 mV / - 56.95 dBu.
AUX (Impedance/Sensitivity):	47 kΩ / 500 mV / -3.80 dBu.
Power IN (Impedance/Sensitivity):	47 kΩ / 1 V / 2.21 dBu.
Low Impedance Output :	4, 8, 16 Ω.
High Impedance Line Output:	100 V.
Pre-out:	600 Ω /1 V.
Frequency Response:	80 Hz - 18 kHz +/- 3 dB.
S/N Ratio:	>75 dB (Line), >65 dB (MIC).
THD:	Less than 0.5% at 1 kHz, rated power.
Priority:	MIC 1.
Main supply AC Power:	115 / 230 V - 50 / 60 Hz.
Main supply DC Power:	12 V - 2.5 A.
Consumption:	36 W.
Dimensions:	240 x 75 x 190 mm.
Weight:	3.2 kg.

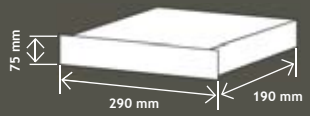
PA 90/2 USB

Public address amplifier

This evolution of the PA 90 model includes a solid state USB/SD MP3 player and two microphone inputs, being a perfect solution to many small size installations like warehouse and car parks. Thanks to the DC 12 V input, it is also possible to connect batteries and use it to make announcements from a car.

Small size installations will take advantage of this very complete device: users can directly connect storage devices with up to 32 GB memory to the built-in solid state audio player and so play thousands of tracks. An auxiliar input is also available for CD or tuner connection. The player includes all the functions required for its control: play/rewind/forward, volume, etc.

PA **90/2 USB** is mainly designed for public address applications, that is why Mic 1 input can be used as a priority channel. It is also suitable for low impedance speakers (4 Ω) and 25, 70 and 100 V Line installations. Additionally, it features a preamp output with all the signals mixed together. This is a great solution for users who need to connect equalizers or additional power amplifiers in the installation.



Features

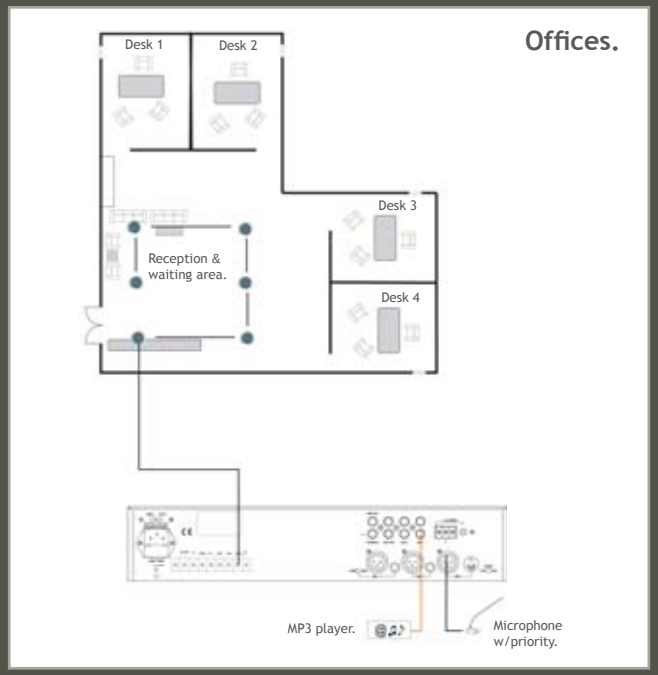
- 30 W power amplifier with mixer.
- 2 microphone inputs with gain control.
- 1 auxiliar line input with gain control.
- Bass/Treble controls.
- Master channel control.
- 1 priority channel available (Mic input 1).
- Built-in solid state player with USB and SD inputs.
- Audio player is suitable for external solid state devices with up to 32 GB memory.
- Plays any MP3 and WMA files.
- PRE OUT output available.
- Direct AMP input available.
- Suitable for low impedance speakers (4 Ω) and 25, 70, 100 V Line installations.

Rear panel

Technical data	PA 90/2 USB
Output Power (RMS):	30 W.
Output Power (Peak):	60 W.
Audio inputs:	2 MIC, 1 AUX level.
USB/SD interface:	MP3 / WMA formats.
MIC inputs (Impedance/Sensitivity):	250 Ω / 1.1 mV / -56.95 dBu.
AUX (Impedance/Sensitivity):	47 kΩ / 500 mV / -3.80 dBu.
Power IN (Impedance/Sensitivity):	47 kΩ / 1 V / 2.21 dBu.
Low Impedance Output:	4 Ω.
High Impedance Line Output:	25 / 70 / 100 V.
Pre-out:	600 Ω /1 V.
Frequency Response:	80 Hz - 18 kHz +/- 3 dB.
S/N Ratio:	>75 dB (Line), >65 dB (MIC).
THD:	Less than 0.5 % at 1 kHz, rated power.
Priority:	MIC 1.
Main supply AC Power:	115/230 V - 50/60 Hz.
Main supply DC Power:	12 V - 2.5 A.
Consumption:	60 W.
Dimensions:	280 x 75 x 190 mm.
Weight:	4.5 kg.

PA 60 USB/R

Mixing amplifier with audio player/recorder

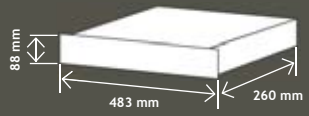


Installation of a sound system in the reception and waiting areas of offices, With priority output source for announcements.

PA 60 USB/R is a 60 W power amplifier that features a 5 input mixer and a solid state audio player/recorder (USB/SD) compatible with standard formats (MP3, WMA). It is possible to record voice messages and then play them back. The device supports USB and SD storage devices with up to 32 GB memory.

Regarding audio control, the mixer includes all the functions required for full control of the 5 signal inputs: independent volume control, master control of level, bass and treble tone. The mixer also has a pre-out to send mixed signal to an external amplified system or to connect external devices like equalizers and processors.

PA 60 USB/R is suitable for low impedance speakers (8 Ω) and high impedance loads (25/70/100 V). In addition, for maximum safety in the whole installation, it includes a Chime On/Off switch and a Telephone/Emergency connection for emergency announcements. DC 24 V terminals are also available for emergency backup.



Features

- Installed sound power amplifier and 5 input mixer.
- Solid state audio player/recorder (USB/SD) with standard formats (MP3, WMA).
- Supports storage devices of up to 32 GB.
- 2 Aux inputs + 3 Mic inputs.
- Mic 1 input with priority.
- Mixer with independent control of volume.
- Master control and treble/bass tone.
- Pre-out function.
- Suitable for low impedance speakers (8 Ω) and high impedance loads (25/70/100 V).
- Chime On/Off switch.
- Telephone/Emergency connection for paging and emergency announcements.
- Terminals for emergency supply (DC 24 V).
- 2 HU rack enclosure.

Technical data	PA 60 USB/R
Output Power (RMS):	60 W.
Output Power (Peak):	90 W.
Audio inputs:	3 MIC, 1 LINE, 2 AUX level.
USB/SD interface:	MP3 / WMA formats.
MIC inputs (Impedance/Sensitivity):	250 Ω / 1 mV / -57.78 dBu.
LINE (Impedance/Sensitivity):	47 kΩ / 200 mV / -11.76 dBu.
AUX (Impedance/Sensitivity):	47 kΩ / 200 mV / -11.76 dBu.
Power IN (Impedance/Sensitivity):	47 kΩ / 1 V / 2.21 dBu.
Low impedance:	8 Ω.
High impedance Line:	25 / 70 / 100 V.
Tape:	4k7 Ω / 350 mV.
Pre-out:	600 Ω / 1V.
Frequency Response:	50 Hz - 20 kHz +/- 3dB.
EQ Control:	
Bass:	(+/- 10 dB)/ 31 Hz - 180 Hz / Centre freq. 80 Hz.
Treble:	(+/- 10 dB)/ 2k5 Hz - 20 kHz / Centre freq. 10 kHz.
S/N Ratio:	>75 dB (Line), >60 dB (MIC).
THD:	Less than 1% at 1kHz, rated power.
Chime:	2 tone chime ('Ding-dong' pre-announcement chime).
Priority:	Tel./Emer. - MIC1.
Main supply AC power:	115 / 230V - 50 / 60 Hz.
Main supply DC power:	24 V - 8 A.
Consumption:	170 W.
Dimensions:	483 x 88 x 260 mm.
Weight:	8 kg.

Accessories for rack fixation (included).

Rear panel

PA 120 USB/R

Mixing amplifier with audio player/recorder

This 120 W power amplifier differentiates itself from the other models of the **PA USB/R series** with its two different outputs: Music/Speech and Priority only.

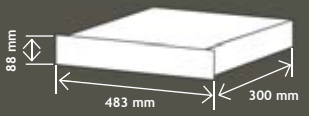
It includes a solid state audio player/recorder (USB/SD) compatible with standard formats (MP3, WMA). It is possible to record voice messages and then play them back. The device supports USB and SD storage devices with up to 32 GB memory.

The **PA 120 USB/R** features 6 inputs: 4 double Mic inputs with 5 pin DIN connectors (2 combo, 2 XLR3), 1 Aux and 1 CD. It is possible to play background music in a specific area and send priority messages to the overall installation.

The mixer includes all the functions required for full control of the signal inputs: independent volume control, master control of level, bass and treble tone. It also has a pre-out to send mixed signal to an external amplified system or to connect external devices like equalizers and processors. A monitor output allows connecting up to 1W of load such as a control room monitor speaker.

PA 120 USB/R is suitable for low impedance speakers (8 Ω) and 100 V Line installations. In addition, for maximum safety in the whole installation, it includes a Chime On/Off switch and a Telephone/Emergency connection for announcements. 24 V dc terminals are also available for emergency backup.

Rear panel

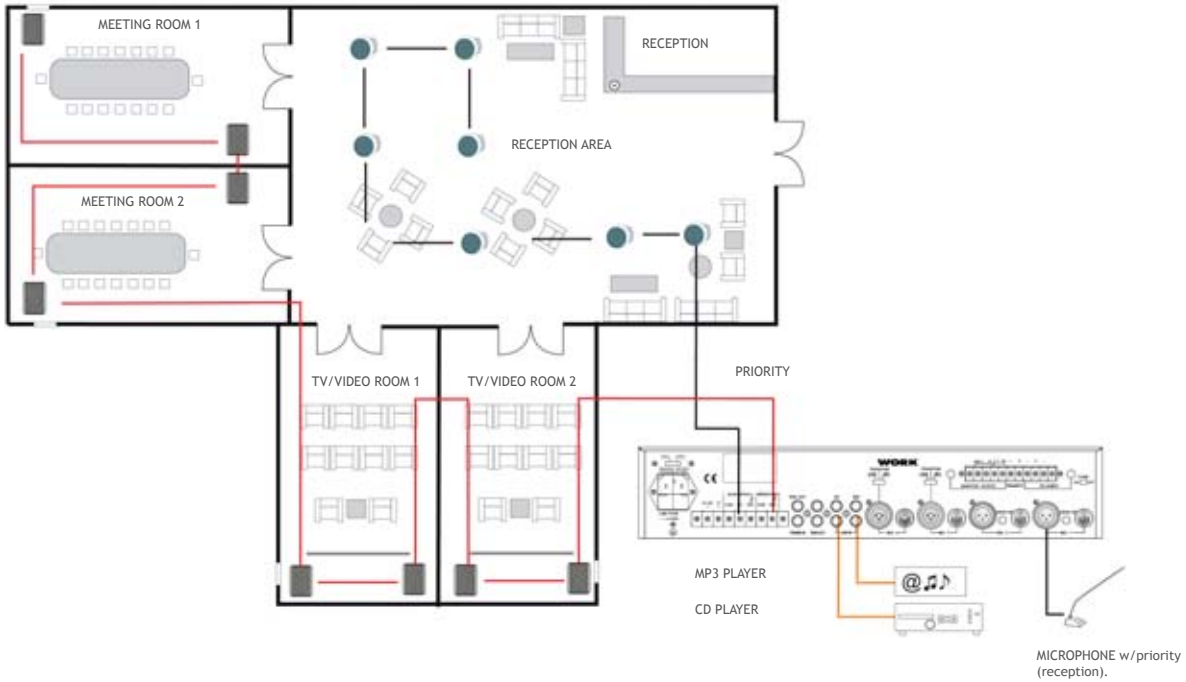


Features

- Installed sound power amplifier and 6 input mixer.
- Solid state audio player/recorder (USB/SD) with standard formats (MP3, WMA).
- Supports storage devices with up to 32 GB.
- 2 double Mic inputs with Combo and 5 pin DIN connectors.
- 2 double Mic inputs with XLR3 and 5 pin DIN connectors.
- 1 Aux input.
- 1 CD input.
- Cascading multi-level priority on mic inputs.
- Mixer with independent control of volume.
- Master control and treble/bass tone.
- Pre-out function.
- Suitable with low impedance speakers (8 Ω) and high voltage line (100 V).
- Monitor output (8 Ω, 1 W).
- Chime On/Off switch.
- Telephone/Emergency connection for paging and announcements.
- Terminals for emergency supply (24 V dc).
- 2 HU rack enclosure.

Technical data	PA 120 USB/R
Output Power (RMS):	120 W.
Output Power (Peak):	180 W.
Audio inputs:	4 MIC, 1 CD, 1 AUX level.
USB/SD interface:	MP3 / WMA formats.
MIC inputs (Impedance/Sensitivity):	250 Ω / 1 mV / -57.78 dBu.
LINE (Impedance/Sensitivity):	47k Ω / 100 mV / -17.78 dBu.
CD (Impedance/Sensitivity):	47k Ω / 500 mV / -3.80 dBu.
AUX (Impedance/Sensitivity):	47 kΩ / 200 mV / -11.76 dBu.
Power IN (Impedance/Sensitivity):	47 kΩ / 1 V / 2.21 dBu.
Music/Speech:	8 Ω /100 V.
Speech only:	100 V.
Tape:	4k7 Ω / 350 mV.
Pre-out:	600 Ω / 1V.
Monitor:	8 Ω / 1W - 600 Ω / 1V.
Frequency Response:	50 Hz - 20 kHz +/- 3 dB.
EQ Control:	
Bass:	(+/- 10 dB) / 31 Hz - 180 Hz / Centre freq. 80 Hz.
Treble:	(+/- 10 dB) / 2k5 Hz - 20 kHz / Centre freq. 10 kHz.
S/N Ratio:	>80 dB (Line), >60 dB (MIC).
THD:	Less than 1% at 1kHz, rated power.
Chime:	2 tone chime ('Ding-dong' pre-announcement chime).
Priority:	Tel./Emer. - MIC1-MIC2-MIC3-MIC4-AUX/CD-USB/SD.
Main supply AC Power:	115 / 230 V - 50 / 60 Hz.
Main supply DC Power:	24 V - 12 A.
Consumption:	270 W.
Dimensions:	483 x 88 x 300 mm.
Weight:	10 kg.

Hotel Lounge.



Installation of enviromental sound system in the reception area. Several meeting rooms and TV/VIDEO rooms with priority output source for emergency and announcements.

Accessories for rack fixation (included).

PA 190 USB/R
PA 240 USB/R

Mixing amplifier with audio player/recorder

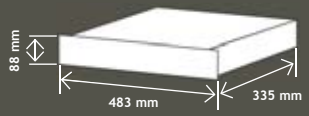
The **PA 190 USB/R** and **PA 240 USB/R** are powerful installed sound power amplifiers which deliver 180 W and 240 W output power. They can supply up to 4 different zones thanks to their front panel zone select buttons.

They both include a solid state audio player/recorder (USB/SD) compatible with standard formats (MP3, WMA). It is possible to record speechs and save them in a USB storage device. They support USB and SD storage devices with up to 32 GB memory.

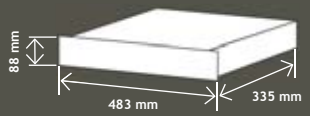
Regarding audio control, their 5 input mixer (4 selectable Mic/Line, 1 Aux/CD/Tuner/Tape) includes all the functions required for full control: independent volume control, master control of level, bass and treble tone. The mixer also has a pre-out to send mixed signal to an external amplified system or to connect external devices like equalizers and processors.

Designed for installed sound system installations, they are suitable for low impedance speakers (4, 8 and 16 Ω) and high voltage lines (25/70/100 V). A monitor output is suitable for connecting up to 1W of load such as a control room monitor speaker. In addition, for maximum safety in the whole installation, it includes a Chime On/Off switch and a Telephone/Emergency connection for announcements.

PA 190 USB



PA 240 USB



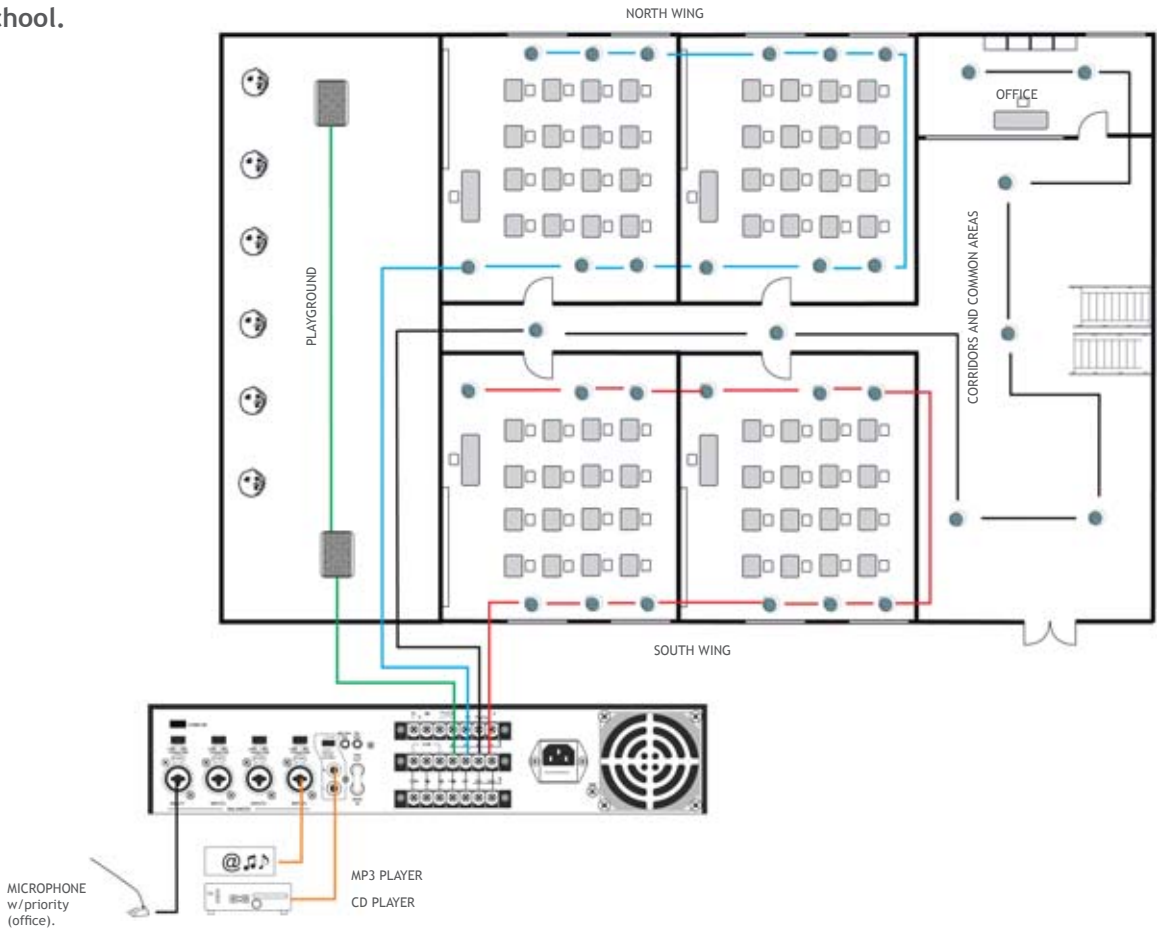
Features

- Installed sound power amplifiers + 5 input mixer with 4 selectable zones.
- Solid state audio player/recorder (USB/SD) with standard formats (MP3, WMA).
- Support storage devices with up to 32 GB.
- 4 Mic inputs + 4 Line inputs.
- 1 Aux/CD/Tuner/Tape input.
- Monitor output.
- Mixer with independent control of volume, Master control and treble/bass tone.
- Pre-out function.
- Suitable with low impedance speakers (4, 8 and 16 Ω) and high impedance (25/70/100 V).
- Chime On/Off switch.
- Telephone/Emergency connection for announcements.
- 2 HU rack enclosures.

Rear panels

PA 190 USB / PA 240 USB

School.



Accessories for rack fixation (included).

Installation of enviromental sound system in a school. 4 different zones (common areas, playground, north/south wing classroom). All zones with priority output source for emergency and announcements.

Technical data	PA 190 USB/R	PA 240 USB/R
Output Power (RMS):	180 W.	240 W.
Output Power (Peak):	240 W.	300 W.
Audio inputs:	4 Mic/Line, 1 LINE (CD,Tuner/Tape/Aux) level.	4 Mic/Line, 1 LINE (CD,Tuner/Tape/Aux) level.
USB/SD interface:	MP3/WMA formats.	MP3/WMA formats.
MIC inputs (Impedance/Sensitivity):	600 Ω/2.7 mV / - 49.15 dBu.	600 Ω / 2.7 mV / - 49.15 dBu.
LINE (Impedance/Sensitivity):	47k Ω/100 mV / -17.78 dBu.	47k Ω / 100 mV / -17.78 dBu.
CD (Impedance/Sensitivity):	47k Ω/570 mV / -2.66 dBu.	47k Ω / 570 mV / -2.66 dBu.
AUX (Impedance/Sensitivity):	20k Ω/100 mV / -17.78 dBu.	20k Ω / 100 mV / -17.78 dBu.
Tuner (Impedance/Sensitivity):	56k Ω/300 mV / -8.23 dBu.	56k Ω / 300 mV / -8.23 dBu.
Tape (Impedance/Sensitivity):	1k Ω/1V / 2.21 dBu.	1k Ω/1V / 2.21 dBu.
Direct outputs:	4, 8, 16 Ω / 25, 70, 100 V.	4, 8, 16 Ω / 25, 70, 100 V.
Zone outputs:	4 zones: 100 V (ONLY).	4 zones: 100 V (ONLY).
Monitor:	8 Ω / 1W.	8 Ω / 1 W.

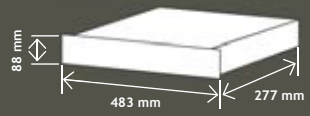
Technical data	PA 190 USB/R	PA 240 USB/R
Pre-out:	600 Ω /1V.	600 Ω /1 V.
Frequency Response:	30 Hz - 20 kHz +/- 3dB.	30 Hz - 20 kHz +/- 3 dB.
EQ Control:		
Bass:	(+/- 10 dB)/ 25 Hz - 160 Hz/ Centre freq. 60 Hz.	(+/- 10 dB)/ 25 Hz - 160 Hz/ Centre freq. 60 Hz.
Treble:	(+/- 10 dB)/ 4 kHz - 20 kHz/ Centre freq. 10 kHz.	(+/- 10 dB)/ 4 kHz - 20 kHz/ Centre freq. 10 kHz.
S/N Ratio:	>80 dB (Line), >60 dB (MIC)	>80 dB (Line), >60 dB (MIC).
THD:	Less than 0.5% at 1 kHz, rated power.	Less than 0.5% at 1 kHz, rated power.
Chime:	4 tone chime ('Ding-dong' attending signal preceding a call).	4 tone chime ('Ding-dong' attending signal preceding a call).
Priority:	Tel./Emer. - Input 5.	Tel./Emer. - Input 5.
Main supply AC Power:	115/230 V - 50/60 Hz.	115/230 V - 50/60 Hz.
Consumption:	395 W.	590 W.
Dimensions:	483 x 88 x 335 mm.	483 x 88 x 335 mm.
Weight:	11.6 kg.	13 kg.

PA 1000

Mono channel power amplifier

This mono channel power amplifier featuring 120 W output power is suitable for 100 V Line installations.

It sizes two HU rack units and it is very easy to use. This is a relevant answer for installations on a budget which require a simple but above all efficient solution.



Features

- 120 W mono channel power amplifier.
- Suitable for 100 V Line installations.
- 2 HU rack enclosure.
- Easy to use.

Rear panel

Technical data	PA 1000
Output power (8 Ω):	120 W.
Output power (4 Ω):	220 W.
Output power (70 V):	120 W.
Output power (100 V):	120 W.
S/N ratio:	>65 dB.
Slew rate:	5 V/us.
Factor damping:	300.
Crosstalk:	>46 dB.
Power ON delay:	7 sec.
Input sensitivity:	700 mV / -0.87 dBu.
Frequency response:	20 Hz - 20 kHz.
Input connection:	XLR.
Link connection:	RCA.
Output connection:	Euroblock.
Soft start:	Yes.
Operating voltage:	185 - 245 V.
Limit:	Clipping at 0 dB.
Dimensions(WxHxD):	483 x 88 x 277 mm.
Weight:	5.4 kg.

PA 5000

High power installed sound amplifer

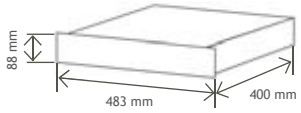
This 480 W power amplifier is designed for installed sound applications that explicitly require high power level and sound quality.

It features a 3 band equalizer, a balanced input with XLR and ¼" Jack connectors. It is suitable for low impedance speakers (4-8 Ω) and high impedance (70/100 V). It is possible to connect several units through the Link outputs, on either XLR or ¼" Jack.

The unit is protected from speaker short circuits, thanks to its signal auto-compression function. Output signal automatically drops down if the temperature starts becoming too high. The overvoltage protection eliminates current fluctuations and starting current peaks.

Features

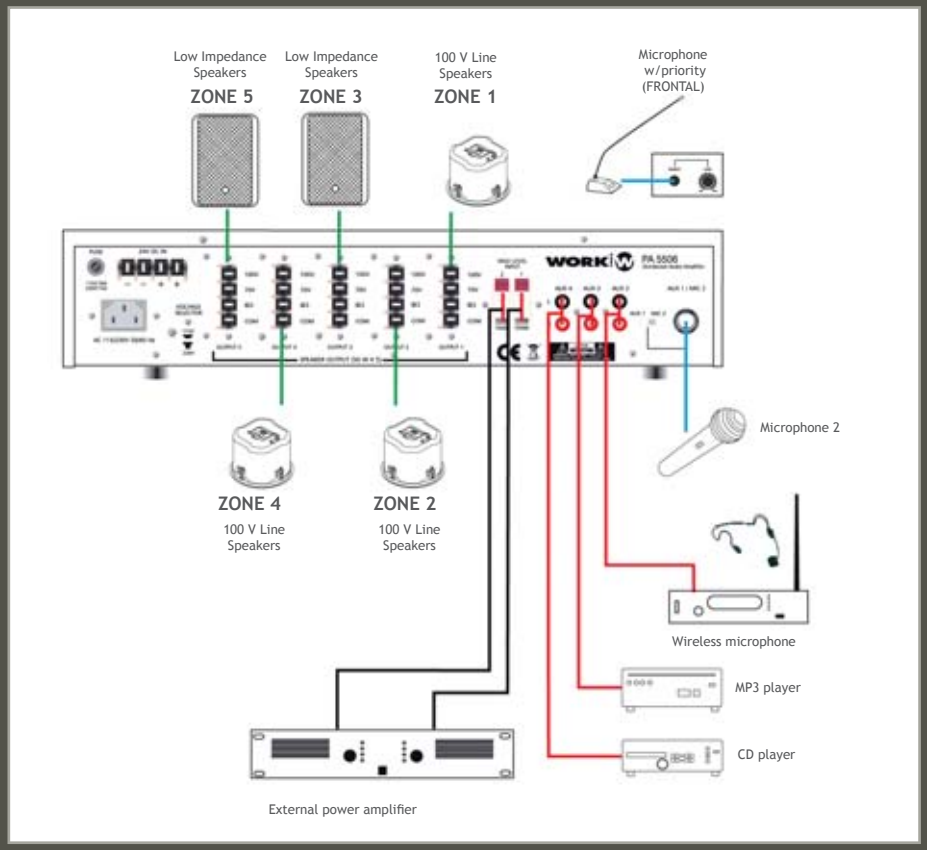
- Designed for applications which require high power level and sound quality.
- 3 band equalizer.
- Balanced inputs (XLR3 - ¼" Jack connectors).
- Suitable for low impedance speakers (4 and 8 Ω) and high impedance (70/100 V).
- Link output for bridge connection between several units.
- Signal auto-compression function.
- Protection from current fluctuations, starting current peaks and short circuits.



Technical data	PA 5000
Output Power (RMS):	480 W.
LINE (Impedance/Sensitivity):	20k Ω/ 1V / 2.21 dBu.
Direct Outputs:	4, 8 Ω / 70, 100 V.
Frequency Response:	50 Hz - 22 kHz +/- 3 dB.
EQ Control:	
Bass:	(+/- 12 dB)/ 20 Hz - 80 Hz/ Centre freq. 30 Hz.
Middle:	(+/- 12 dB)/ 350 Hz - 2 kHz/ Centre freq. 800 Hz.
Treble:	(+/- 12 dB)/ 6.3 kHz - 20 kHz/ Centre freq. 16 kHz.
S/N Ratio:	>90 dB.
Main supply AC Power:	115 / 230 V - 50 / 60 Hz.
Consumption:	1100 W.
Dimensions:	483 x 88 x 400 mm.
Weight:	20 kg.

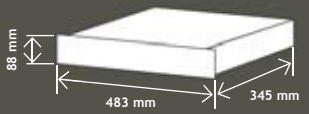
PA 5506

Multizone amplifier



PA 5506 has been designed for installations with low impedance (8 Ω) or constant voltage lines (70/100V).
It features 5 independent outputs (50 W each) with their own input selector. User can select one of the 8 input sources, from mic (one of them with priority) to high level inputs and auxiliary. Input channels include individual gain and bass/treble tone controls. A 24 V DC input is also available for emergency backup.

PA 5506 is a very flexible device: user can select input sources and use them for the 5 available outputs. Thanks to the individual input selector, it is possible to control the overall installation with this unique device. This is a great solution for installations like hotels or commercial centres.



Features

- Installed sound amplifier with 5 independent zones (50 W each).
- 8 input sources (2 Mic, 4 Aux, 2 HL).
- Independent input source selector.
- Individual gain and tone control for each channel.
- Suitable for low impedance speakers (8 Ω) and high impedance (70/100 V).
- Protection from shortcircuits, overload and overheat.

Rear panel

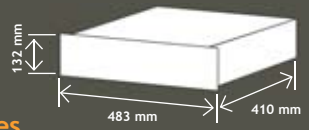
Technical data	PA 5506
Output Power (RMS):	5x 50 W.
Output Power (Peak):	5x 100W.
Audio inputs:	1 MIC (priority), 5x (1xMic+4xAUX+2xHI.LEVEL).
MIC inputs (Impedance/Sensitivity):	600 Ω/1 mV / -57.78 dBu.
HI LEVEL (Impedance/Sensitivity):	300 Ω/100 V.
AUX (Impedance/Sensitivity):	20 kΩ/200 mV / -11.76 dBu.
Low Impedance:	8 Ω.
High Impedance Line:	70/100 V.
Frequency Response:	50 Hz - 20 kHz +/- 3 dB.
EQ Control:	
Bass:	± 10 dB at 100 Hz.
Treble:	± 10 dB at 10 kHz.
S/N Ratio:	<70 dB .
THD:	Less than 0,1% at 1kHz, rated power.
Factor damping:	>200.
Priority:	MIC1.
Main supply AC Power:	115 / 230 V - 50 / 60 Hz.
Main supply DC Power:	24V - 4 A.
Consumption:	640 W.
Dimensions:	425 x 88 x 345 mm.
Weight:	15 kg.

PA 4100

Installed sound amplifier

Suitable for almost any installation, this versatile installed sound amplifier features 4 independent outputs of 250 W with their own tone controls and independent volume. It supports low and high impedance loads.

PA 4100 features 4 audio inputs with volume control which can be independently configured as Mic or Line inputs with +48 V phantom power, phase inversion and High-pass filter functions (selectable by dip-switch blocks). The first Mic input has a selectable priority circuit. It also features 2 Aux inputs, remotely triggerable chime, siren and telephone paging.

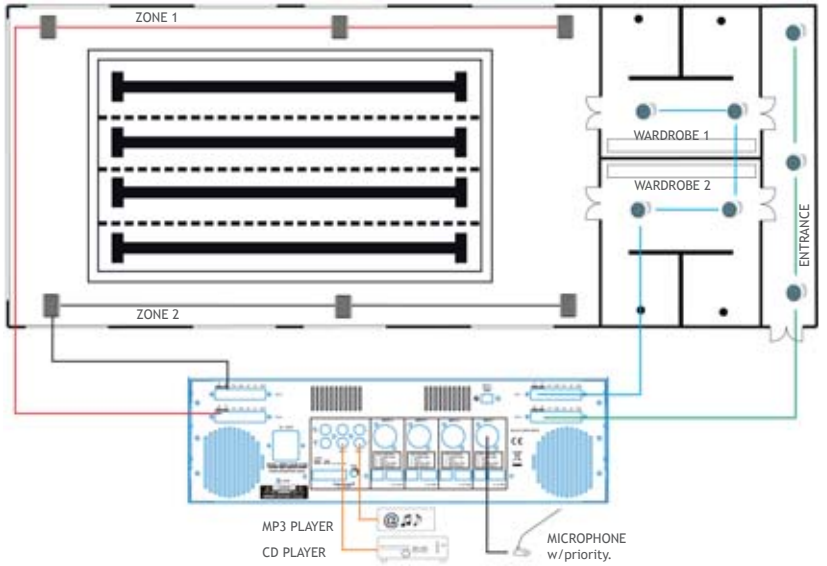


Features

- Installed sound amplifier with 4 independent zones (250 W each).
- 4 configurable input sources (Mic/Line +48 V, Phantom supply, phase inversion, high-pass filter).
- 2 Aux inputs (Line), chime, siren and tel. paging.
- 3U rack enclosures.

Rear panel

Sport Facility.

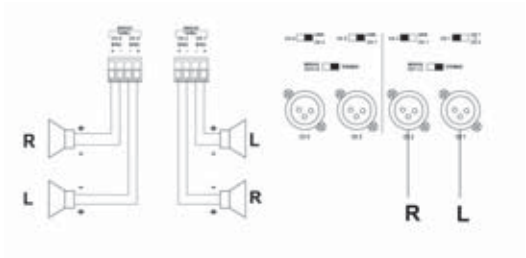


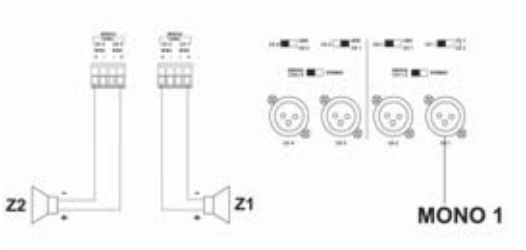
Installation of enviromental sound system in a sport facility. 4 different zones (entrance, wardrobes and 2 zones in the swimming pool). All zones with priority output source for emergency and announcements.

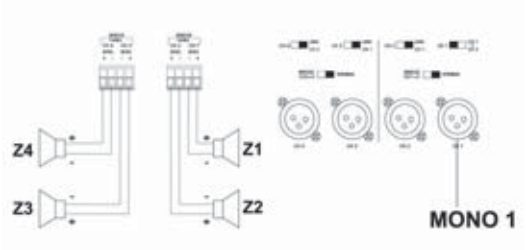
Technical data	PA 4100
Output Power (RMS):	4 x 250 W.
Audio inputs:	4 Mic/Line, 2 AUX level.
MIC inputs (Impedance/Sensitivity):	600 Ω /2.8 mV / -48.83 dBu.
LINE (Impedance/Sensitivity):	3 kΩ /316 mV / -7.78 dBu.
AUX (Impedance/Sensitivity):	50 kΩ / 316 mV / -7.78 dBu.
Low Impedance:	4, 8 Ω.
High Impedance Line:	25 / 70 /100 V.
Frequency Response:	50 Hz - 17 kHz +/- 3 dB.
EQ control:	
Bass:	(+/- 10 dB)/ 22 Hz - 180 Hz/ Centre freq. 50 Hz.
Treble:	(+/- 10 dB)/ 3k Hz - 20 kHz/ Centre freq. 12 kHz.
S/N Ratio:	>90 dB (Line), >80 dB (MIC).
THD:	Less than 1% at 1 kHz, rated power.
Chime:	2 tone chime ('Ding-dong' attending signal preceding a call).
Priority:	Tel./Emer. - MIC 1.
Main supply AC Power:	115/230 V - 50/60 Hz.
Consumption:	1100 W.
Dimensions:	483 x 132 x 410 mm.
Weight:	25.2 kg.

PA 1504

Multizone power amplifier





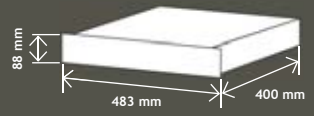


Designed for multizone applications.

PA 1504 is a power amplifier featuring 4 channels of 150 W each. Using switches, user can easily combine inputs and edit configuration of the installation.

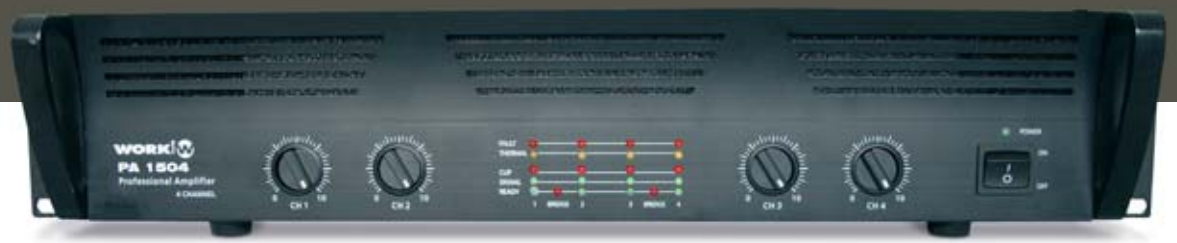
Depending on switch position, the amplification system changes audio distribution in the different areas (up to 4 audio sources available for each of the 4 areas).
PA 1504 can also be used as a sound reinforcement system for a concrete area (mono or stereo, for 1, 2 or 4 different outputs).
Another switch is dedicated to operating modes. Integrators can choose between stereo and bridge modes and take advantages of new possibilities of use.

PA 1504 has individual gain controls on front panel and LEDs which indicate the state of each channel (signal, clip, protections or Bridge mode). The unit is protected from speaker short circuits, thanks to its signal auto-compression function. Output signal automatically drops down if the temperature starts becoming too high. Overvoltage protection eliminates current fluctuations and starting current peaks.



Features

- 4 channel power amplifier (150 W each).
- 4 switches for input configurations (from 1 zone to 4 zones).
- Many configurations available.
- Individual control of volume for each channel.
- LED indicators on front panel (Fault, thermal, clip, signal, ready).
- Protections against overheat, short circuit and DC at the output.



Technical data	PA 1504
Number of input channels:	4.
Number of output channels:	4.
4 Ω mono output power:	150 W x 4.
8 Ω bridge output power:	300 W x 2.
Frequency response:	20 Hz - 20 kHz.
THD+N:	<0.1%.
S/N ratio:	>100 dB.
Factor damping:	>200.
Dynamic range:	>105 dB.
Input impedance:	18 kΩ balanced, 15 kΩ unbalanced.
Input sensitivity:	1 V / 2.21 dBu.
Rear panel connectors:	4 x XLR3 (input), 2 x euroblock 4pin (output) /1 x IEC (supply).
Protections:	Overheat, short circuit, DC protection, CLIP.
Main supply:	AC 115-230 V, 60/50 Hz.
Dimensions (WxHxD):	483 x 88 x 400 mm.
Weight:	13.6 kg.

Switch position to easily edit amplification system, taking advantage of the four audio sources available for each of the four zones.

Rear panel

ZENITH series

Power amplifiers with switching mode power supply

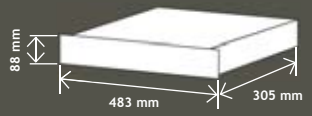
Technology for high reliability.

These power amplifiers with switching mode power supply provide a great level of signal integration and elevated output power. Their LLC resonant circuit, specially designed for power amplifiers with high output power, ensures power reliability and reduces its influence in the amplifier. Zenith power amplifiers are very light, due to the characteristics of the switching power supply. To face electrical load fluctuations of the amplifier, They include an ultra-fast response time technology with high slew-rate.

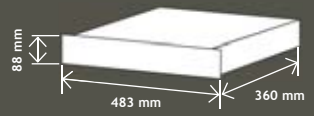
A wide range of possibilities.

Zenith power amplifiers allow working with either balanced or unbalanced signals. Their sensitivity input selector makes them suitable for almost any installation. The three operating modes available (Stereo, bridge or Parallel) and low-frequency enhancer increase the flexibility of the series.

ZENITH 600



ZENITH 1300
ZENITH 1800
ZENITH 2400



Features

- Lightweight power amplifiers with switching mode power supply.
- LLC resonant circuit, designed to ensure power reliability and to reduce its influence in the amplifier.
- Selector for operating modes: Stereo, Bridge and Parallel.
- Selector for input sensitivity: 26 dB/32 dB.
- Low frequency enhancer.
- Optimum operating load at 2 Ω.
- Protections from short-circuits at the output, overheat, DC.
- Continuous high frequency signals.

Lightweight power amplifiers, thanks to their switching mode power supply.

Rear panels

ZENITH 600 and ZENITH 1300

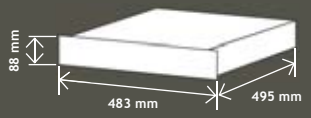
ZENITH 1800 and ZENITH 2400

Input connections.

Technical data	ZENITH 600	ZENITH 1300	ZENITH 1800	ZENITH 2400
Number of input channels:	2.	2.	2.	2.
Number of output channels:	2.	2.	2.	2.
8 Ω stereo output power:	200 W x 2.	310 W x 2.	450 W x 2.	600 W x 2.
4 Ω stereo output power:	300 W x 2.	500 W x 2.	750 W x 2.	1000 W x 2.
2 Ω stereo output power:	450 W x 2.	600 W x 2.	1000 W x 2.	1250 W x 2.
8 Ω bridge output power:	600 W.	1000 W.	1500 W.	2000 W.
4 Ω bridge output power:	850 W.	1200 W.	2000 W.	2600 W.
8 Ω parallel output power:	200 W.	310 W.	450 W.	600 W.
Frequency response:	20 Hz - 20 kHz.	20 Hz - 20 kHz.	20 Hz - 20 kHz.	20 Hz - 20 kHz.
THD+N:	<0,05%.	<0,05%.	<0,05%.	<0,05%.
S/N ratio:	>100 dB.	>100 dB.	>100 dB.	>100 dB.
Factor damping:	>150.	>200.	>250.	>200.
Dynamic range:	>80 dB.	>80 dB.	>80 dB.	>80 dB.
Voltage gain:	26 dB/32 dB.	26 dB/32 dB.	26 dB/32 dB.	26 dB/32 dB.
Input impedance:	20 kΩ balanced, 10 kΩ unbalanced.	20 kΩ balanced, 10 kΩ unbalanced.	20 kΩ balanced, 10 kΩ unbalanced.	20 kΩ balanced, 10 kΩ unbalanced.
Input sensitivity:	2.2 V / 1.05 V 9.06 dBu / 2.64 dBu.	2.48 V / 1.244 V 10.10 dBu / 10.65 dBu.	3.1 V / 1.55 V 12.04 dBu / 6.02 dBu.	3.46 V / 1.73 V 13 dBu / 6.97 dBu.
Rear panel connectors:	2 x ¼" Jack -XLR3 (Input) 2 x XLN4 (output)/ 1xIEC(supply).	2 x ¼" Jack -XLR3 (Input) 2 x XLN4 (output)/ 1xIEC(supply).	2 x ¼" Jack -XLR3 (Input) 2 x XLN4, 4 x Binding Post (output)/1xIEC(supply).	2 x ¼" Jack -XLR3 (Input) 2 x XLN4, 4 x Binding Post (output)/1xIEC(supply).
Protections:	Overheat, VHF, Short circuit, AC lower, DC Protection, CLIP/Limit.			
Main supply:	AC 180-260 V, 60/50 Hz.	AC 180-260 V, 60/50 Hz.	AC 180-260 V, 60/50 Hz.	AC 180-260 V, 60/50 Hz.
Dimensions (WxHxD):	483 x 88 x 305 mm.	483 x 88 x 360 mm.	483 x 88 x 360 mm.	483 x 88 x 360 mm.
Weight:	6 kg.	8.75 kg.	11 kg.	11.1 kg.

WXP series

Power amplifiers with switching mode power supply



Features

- Power amplifiers with switching mode power supply.
- Balanced input to ensure noiseless wiring.
- Active distortion revision to reduce sub-frequency resonance.
- Audio control circuit for a high S/N ratio when signal is weak.
- External circuit breaker.
- Continuous fan operation.
- Protection from overload, overheat, short circuits and DC protection at the output.

Minimum weight thanks to their switching mode power supply.

WXP power amplifiers particularly stand out for their switching mode power supply and high quality components.

Circuits have been carefully designed to ensure the best performance and a perfect linear frequency response. It provides a high S/N ratio when signal is weak. The active distortion revision reduces subfrequency response.

Best performances.

Thanks to their switching mode power supply, all the energy is dedicated to amplification: heat dissipation is better controlled for a longer lifetime in comparison with other amplifiers using conventional power supply systems.

WXP 3 / WXP 5

Rear panels

WXP 7

Technical data	WXP 3	WXP 5	WXP 7
Number of input channels:	2.	2.	2.
Number of output channels:	2.	2.	2.
8 Ω stereo output power:	300 W x 2.	500 W x 2.	650 W x 2.
4 Ω stereo output power:	500 W x 2.	750 W x 2.	1000 W x 2.
8 Ω bridge output power:	1000 W.	1500 W.	2000 W.
Frequency response:	25 Hz - 25 kHz.	25 Hz - 25 kHz.	25 Hz - 25 kHz.
THD+N:	< 0.04 %	< 0.04 %	< 0.04 %
S/N ratio:	> 100 dB.	> 100 dB.	> 100 dB.
Factor damping:	400.	400.	400.
Dynamic range:	100 dB.	100 dB.	102 dB.
Voltage gain:	33 dB.	35 dB.	36dB.
Input impedance:	47 kΩ (balanced/unbal.).	47 kΩ (balanced/unbal.).	47 kΩ (balanced/unbal.).
Input sensitivity:	1 V / 2.21 dBu.	1 V / 2.21 dBu.	1 V / 2.21 dBu.
Rear panel connectors:	2 x XLR3 (input) 2 x XLN4, 4 x Binding Post (output)/ 1 x IEC (supply).	2 x XLR3 (input) 2 x XLN4, 4 x Binding Post (output)/ 1 x IEC (supply).	2 x XLR3 (input) 2 x XLN4, 4 x Binding Post (output)/ 1 x IEC (supply).
Protections:	Overheat, Short circuit, DC Protection, CLIP.		
Main supply:	AC 220-240 V 60/50 Hz.	AC 220-240 V 60/50 Hz.	AC 220-240 V 60/50 Hz.
Dimensions (WxHxD):	483 x 88 x 495 mm.	483 x 88 x 495 mm.	483 x 88 x 495 mm.
Weight:	9.8 kg.	10.6 kg.	11.2 kg.

WCE series

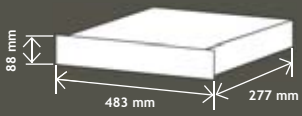
Power amplifiers with switching mode power supply

The **WCE series** is composed of two reliable power amplifiers. Thanks to their switching mode power supply, all the energy is dedicated to amplification, with a very high power conversion efficiency.

The class D amplifier provides a reduction in size and weight of the unit, as well as a reduced power waste. Smaller heat sink and compact circuitry lead to a reduction in cost, being very convenient for common audio installations.

WCE 200

WCE 400



Features

- Power amplifiers with switching mode power supply.
- Compact and lightweight design, thanks to the class D amplifier.
- Anti-clipping function.
- Bicolor LED to indicate operating mode and protections active.
- Balanced and unbalanced inputs available.

WCE 200

WCE 400

Rear panels

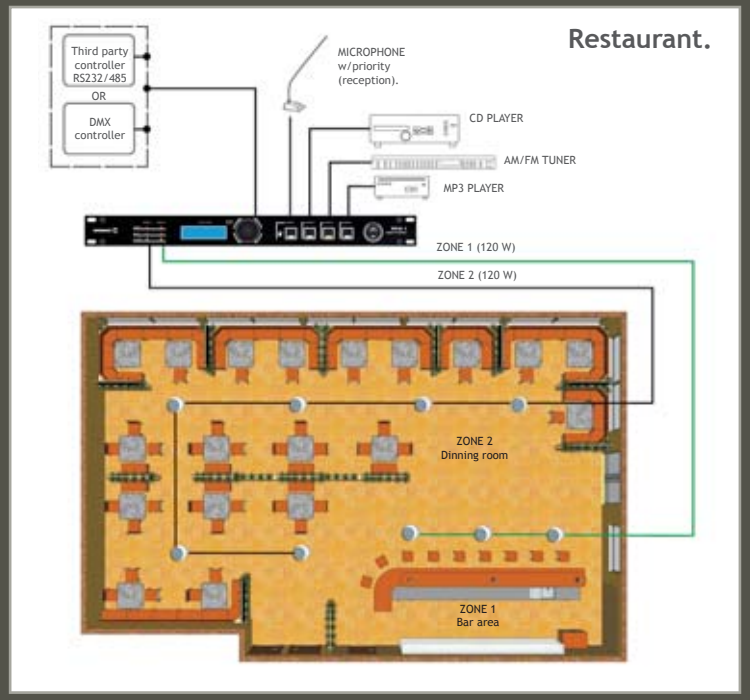
WCE 200

WCE 400

Technical data:	WCE 200	WCE 400
Number of input channels:	2.	2.
Number of output channels:	2.	2.
8 Ω stereo output power:	150 W.	220 W.
4 Ω stereo output power:	220 W.	400 W.
8 Ω bridge output power:	500 W.	800 W.
8 Ω parallel output power:	440 W.	760 W.
Frequency response:	20 Hz - 20 kHz.	20 Hz - 20 kHz.
THD+N:	0.05%.	0.05%.
S/N ratio:	>65 dB.	>67 dB.
Factor damping:	300.	300.
Voltage gain:	32 dB.	32 dB.
Input impedance:	20 kΩ (balanced).	20 kΩ (balanced).
Input sensitivity:	700 mV / -0.87 dBu.	800 mV /0.28 dBu.
Rear panel connectors / controls:	2x XLR3 (balanced inputs), 1x bual RCA (unbalanced inputs), 1x IEC (main supply), 2x Dual Binding Post (outputs). Operating mode switch (PR/ST/BR).	
Protections:	Overheat, short circuit, DC protection, CLIP.	
Main supply:	AC 185-245V, 60/50 Hz.	AC 185-245V, 60/50 Hz.
Dimensions (WxHxD):	483 x 44 x 277 mm.	483 x 88 x 277 mm.
Weight:	3.2 kg.	4 kg.

DCA 1

Remote controlled amplifier



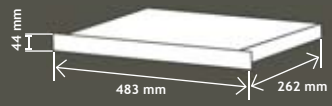
Installation of enviromental sound system in a restaurant. Two separate zones (dinning room and bar area) amplified with 120 W each one. Several audio sources and two different control ways: conventional DMX controller or third party controller RS232/RS485.

Many integrators will find in **DCA 1** a relevant solution for amplification in installations like restaurants and small retail stores. This versatile, controllable power amplifier is a great alternative to expensive and complicated solutions.

DCA 1 features 4 stereo inputs and one with Mic priority selectable, as well as a double powered output (120 W+ 120 W RMS) with terminal blocks. Three output modes are available to set-up:

- Stereo.
- Parallel, the input is converted to mono and delivered to both outputs.
- 2 zones, users have the possibility to select a different audio source for each zone.

One of the most outstanding advantage is the easy control of the device. Its internal software allows selecting between RS 232 (ASCII orders) and RS 485 (ASCII/DMX orders). Thanks to such versatility, DCA 1 is suitable for almost any third-party controllers.



Features

- 2 zone remote controlled amplifier (120 W + 120 W RMS).
- Designed for small and medium size installations.
- Powered double output with terminal blocks.
- 4 stereo inputs + 1 Mic input.
- 3 operating modes: stereo, parallel and 2 zones.
- Additional output for monitor (Line).
- Password protection to avoid non expert handling.

Technical data	DCA 1
Number of input channels:	1 Mic/Line (stereo) + 3 stereo Line.
Number of output channels:	2 (monitor and powered).
Line inputs sensitivity:	775 mV / 0 dBu.
Mic input sensitivity:	7.7 mV / -40 dBu.
Input impedance:	20 kΩ.
Frequency response:	20 Hz - 20 kHz.
S/N ratio:	> 96 dB.
THD+N:	<0.01%.
Protections:	Overheat, short circuit, DC protection, CLIP.
Output power:	2 x 120 W RMS (4 Ω).
Operation modes:	Stereo, Parallel, Zone.
Connectivity:	RS232/RS485-DMX.
Display:	Blue backlight 2x16 alphanumeric LCD.
Rear panel connectors:	4 x RCA double (line inputs), 1x XLR3(mic input), 3x Euroblock_3 pin(conectivity), 2 x euroblock_2 pin (powered output), 1x RCA double (monitor output), 1x IEC (Main supply).
Front panel controls:	1x Encoders (Variation,Navigation), 4 x push switch (direct input selection).
Indicators:	LCD display, 4 x green led (direct selection), 6 x led (power amplifier status).
Main supply:	AC 120 or 240 V, 60/50 Hz.
Power consumption:	250 W.
Dimensions (WxHxD):	483 x 44 x 262 mm.
Weight:	2.5 kg.

Rear panel

SLA series

Ultra-compact amplifiers

WORK® presents the **SLA series**, composed of three ultra-compact amplifiers designed for fixed installation that require high quality audio amplification. The 3 models include a class D amplifier, each one with its own output power (up to 2 x 100 W for **SLA 200**).

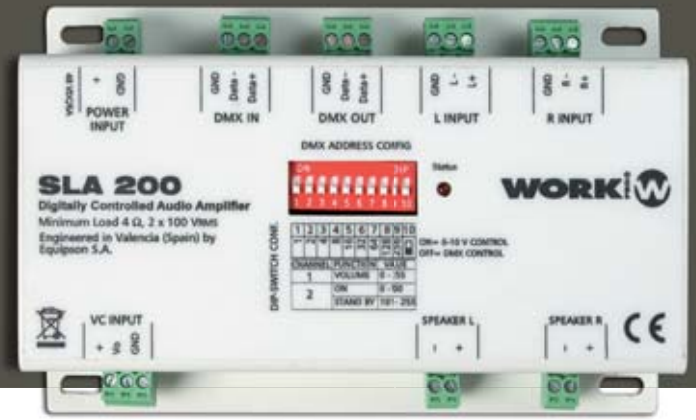
SLA amplifiers are controlled though RS 485/DMX or VCO (0-10 V). Their unique channel allows controlling both gain and Standby mode. They are perfectly suitable for installation loudspeakers and common ceiling speakers. Thanks to their reduced size and DIN-rail format, integration is easier than ever, as they go unperceived in the installation.

Features

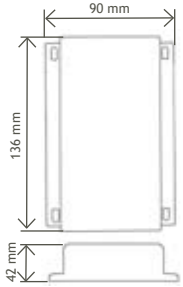
- Ultra-compact amplifiers with class D technology.
- Controlable through RS485/DMX or VCO (0-10 V).
- Gain and Standby mode controlled through a unique channel.
- Additional DIP switch for operating mode selection.
- Din-rail format to optimize its integration in any installation.

SLA 50

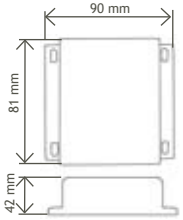
SLA 100



SLA 200

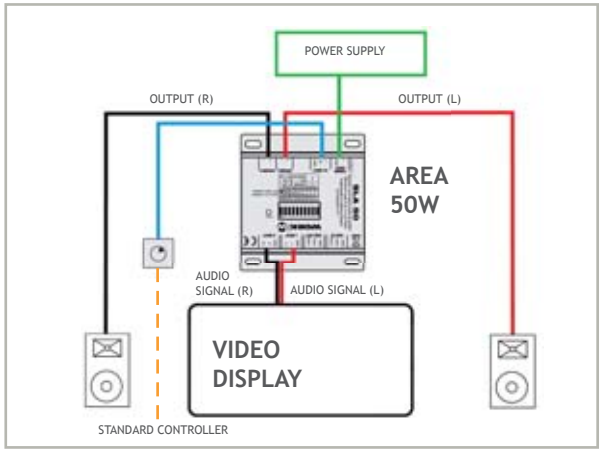


SLA 100 / SLA 200

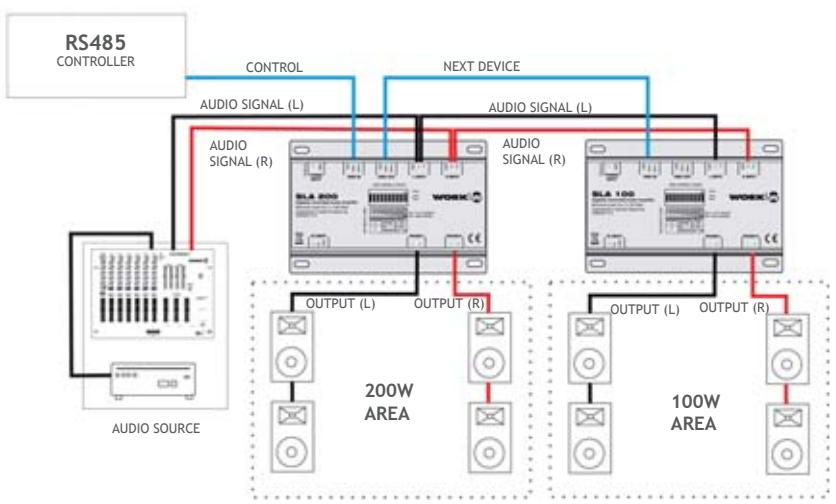


SLA 50

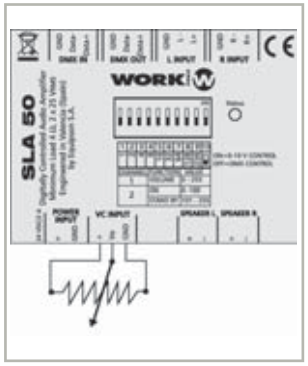
Suitable for Din-rail using the optional accessory **DR 1.**



Installation example.



Technical data	SLA 50	SLA 100	SLA 200
Number of input channels:	2.	2.	2.
Number of output channels:	2.	2.	2.
8 Ω stereo output power:	2 x 12.5 W.	2 x 25 W.	2 x 50 W.
4 Ω stereo output power:	2 x 25 W.	2 x 50 W.	2 x 100 W.
DMX value:	0% - 10% (OFF-Standby) / 11% - 100%(Volume).		
Analog input:	DC 10 V.	DC 10 V.	DC 10 V.
Frequency response:	20 Hz - 20 kHz.	20 Hz - 20 kHz.	20 Hz - 20 kHz.
THD + N:	0.08%	0.03%.	0.08%.
THD (10 W):	0,08%.	0,8%.	0,05%.
Input impedance:	22 kΩ.	22 kΩ.	22 kΩ.
Input sensitivity:	1.6 V / 6.30 dBu.	1.6 V / 6.30 dBu.	1.6 V / 6.30 dBu.
Voltage gain:	20 dB.	23 dB.	23 dB.
Rear connectors:	5 x euroblock (3pin) DMX In/Out, L/R input, VC input; 3 x euroblock (2pin) power input, speaker L/R.		
Front panel controls:	1x DIP Switch Block (10 p) DMX address config.		
Indicators:	1x status (red LED).		
Protections:	Thermal/short-circuit with auto-recovery.		
Cooling:	Fanless.		
Main supply:	DC 24 V.	DC 48 V.	DC 48 V.
Power consumption:	60 W.	120 W.	240 W.
Quiescent Power consumption:	0.6 W.	1.5 W.	1.5 W.
Dimensions:	90 x 81 x 42 mm.	136 x 90 x 42 mm.	136 x 90 x 42 mm.
Weight:	500 g.	600 g.	600 g.



One relevant advantage of the **SLA series** is that you can directly control volume with a simple 3pin potentiometer.

RECOMMENDED POWER SUPPLY:

In order to get the best results with the SLA amplifiers, it is highly recommend to use the power supply MeanWell (directly provided by Equipson). The following tables explain which are the power supply most adequate for any situation.

DR 45-24

DR 120-48

DR 240-48

Recommended power supply.

SLA model	Quantity of SLA units	Recommended supply
SLA 50	1	DR-45-24
SLA 50	2	DR-75-24 DR-120-24
SLA 50	3	DR-120-24
SLA 50	9	DR-480-24
SLA 100	1	DR-120-48
SLA 100	2 or 3	DR-240-48
SLA 100	4 or 5	DR-480-48
SLA 200	1	DR-240-48
SLA 200	2	DR-480-48

Power supply technical data:

Technical data	DR-45-24	DR-75-24	DR-120-24	DR-120-48
Voltage:	24 V.	24 V.	24 V.	48 V.
Rated current:	2 A.	3.2 A.	5 A.	2.5 A.
Rated Power:	48 W.	76.8 W.	120 W.	120 W.
Input voltage:	AC 85 - 264 V; DC 120 - 370 V.	AC 85 - 264 V; DC 120 - 370V	AC 88 - 132 V/ AC 176 - 264 V selected by switch DC 248 V 370 V	AC 88 - 132 V/ AC 176 - 264 V selected by switch DC 248 V 370 V.
Rated current:	47 - 63 Hz.	47 - 63 Hz.	47 - 63 Hz.	47 - 63 Hz.

Technical data	DR-240-48	DR-480-24	DR-480-48
Voltage:	48 V.	24 V.	48 V.
Rated current:	5 A.	10 A.	10 A.
Rated Power:	240 W.	240 W.	480 W.
Input voltage:	AC 85 - 264 V/ DC 120 - 370 V.	AC 85 - 264 V/ DC 120 - 370 V.	AC 85 - 264 V/ DC 120 - 370 V.
Rated current:	47 - 63 Hz.	47 -63 Hz.	47 - 63 Hz.

HomeAMP

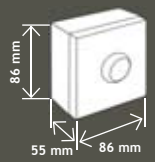
Audio controller and 2 x 20 W amplifier

Audio controller and 2 x 20 W amplifier.

HomeAMP is a ultra-compact amplifier of 2 x 20 W with audio controller.
It features two audio inputs, so users (e.g. customers of an hotel) can choose between background music coming from the rear input and their personal audio player, which can be directly connected to the front panel input of the device (with priority).

An elegant design and an intuitive device.

The elegant shape of **HomeAMP** allows its integration in any environment. With its modern lines and LED colours, it is another element of the decoration. Its user-friendly encoder makes possible the overall control of the installation (push it to switch on/off the device and turn it to adjust volume).



Features

- Audio controller and 2 x 20 W amplifier.
- Two audio inputs: one on rear panel for background music, one on front panel (Mini-Jack).
- Elegant shape for an easy integration in installations.
- User-friendly central encoder.
- Visual information: LED intensity changes to indicate current audio level.

LED INDICATOR

LED intensity changes to indicates audio level.

A VERY REDUCED SIZE

It features a 2 x 20 W amplifier in a standard electrical box, for an easy integration in any installations.

2 INDEPENDENT AUDIO INPUTS

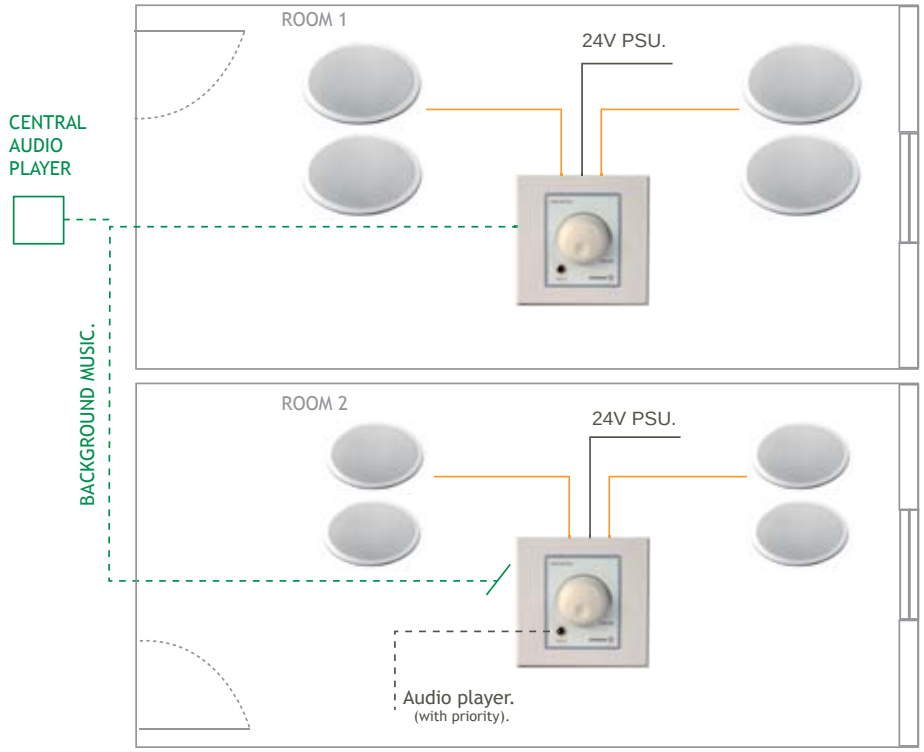
Listen to background music connected to the rear panel of HomeAMP. If you prefer, you can connect your audio player and listen to your favourite music.

USER-FRIENDLY ENCODER

Push it to switch on/off the device and turn it to adjust volume.

Technical data	HomeAMP
Output power (DC 24 V):	2 x 18 W.
Output power (DC 27 V):	2 x 20 W.
Minimum load:	4 Ω.
Input sensitivity:	707 mV RMS / -0.79 dBu.
Gain:	20 dB.
S/R ratio:	99 dB.
THD + N (4 Ω /1 kHz / 10 W):	0.08%.
THD + N (8 Ω /1 kHz / 5 W):	0.08%.
Rear panel connector:	1x Euroblock 3 pin (L/R inputs), 2x Euroblock 2 pin (L/R outputs), 1x Euroblock 2 pin (DC voltage).
Front panel connector:	1x Encoder (Volume gain), 1x Mini-jack 3.5 mm (input).
Indicators:	Panel indicating light (LED).
Protections:	Thermal/short-circuit with auto-recovery, Polarity inversion.
Main supply:	DC 24 V.
Power consumption:	25 W.
Dimensions (WxHxD):	86 x 86 x 55 mm.
Weight:	1 kg.

Installation example.



Side view

FB1 (optional electrical box for HomeAMP)

QMAX series

Equalizer with constant Q factor

The three equalizers of the **QMAX series** use the highest quality standards, providing a constant Q-value in filters. Each model has its own quantity of frequency bands: 2 x 15 bands for **QMAX 152**, 2 x 30 bands for **QMAX 302** and 2 x 31 bands for **QMAX 231**.

In order to ensure the full control of equalization parameters, this series includes relevant features: range selector (±6/±12 dB), balanced and unbalanced inputs/outputs, RF filters, adjustable level control, passive bypass switch, overload threshold LED, ground lift switch and selectable main voltage switch.

Features

- Equalizers with constant Q factor (constant bandwidth).
- 2 channels of 15 bands ⅓ octave for QMAX 152.
- 2 channels of 30 bands ⅓ octave for QMAX 302.
- 2 channels of 31 bands ⅓ octave for QMAX 231.
- 2 band limiter filter fully adjustable on each channel.
- Selectable range between ±6 dB or ±12 dB.
- Bypass switch.
- Balanced/unbalanced inputs and outputs.
- Output gain indicators.

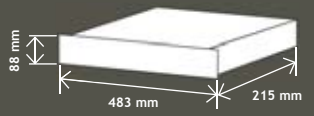
QMAX 152

QMAX 231

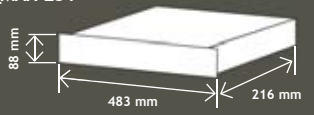
QMAX 302

Rear panels

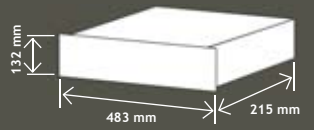
QMAX 152



QMAX 231



QMAX 302



Technical data	QMAX 152	QMAX 231	QMAX 302
Frequency bands:	2 x 15, 1/3 octave.	2 x 31, 1/3 octave.	2 x 30, 1/3 octave.
Filter type:	Constant Q -3% central correction.	Constant Q -3% central correction.	Constant Q -3% central correction.
Selectable range:	±6 dB or ±12 dB.	±6 dB or ±12 dB.	±6 dB or ±12 dB.
Slide potentiometers:	52 mm with middle point.	20 mm with middle point.	52 mm with middle point.
Low pass:	10 Hz - 230 Hz (+/- 12dB).	10 Hz - 230 Hz (+/- 12dB).	10 Hz - 250 Hz (+/- 12dB).
High pass:	----------	----------	3 kHz - 40 kHz (+/- 12dB).
Frequency response:	20 Hz a 20 kHz, +0.5dB.	20 Hz to 20 kHz, +0.5 dB.	20 Hz to 20 kHz, +0.5 dB.
S/N ratio:	98 dB / 105 dB.	94 dB.	98 dB / 105 dB.
Channel separation:	50 dB / 60 dB.	50 dB / 60 dB.	50 dB / 60 dB.
Output impedance:	150 Ω.	150 Ω.	150 Ω.
Max. output level:	+18 dBm (bal.), +22 dBm (unbal.).	+18 dBm (bal.), +22 dBm (unbal.).	+18 dBm (bal.), +22 dBm (unbal.).
Rear panel connectors:	2x XLR3 (inputs), 2x ¼" Jack (inputs), 2x XLR3 (outputs), 2x ¼" Jack (outputs), 2x Dual RCA (outputs), 1x IEC (Main supply).	2x XLR3 (inputs), 2x Euroblock (3p) (inputs), 2x XLR3 (outputs), 2x Euroblock (3p) (outputs), , 1x IEC (Main supply).	2x XLR3 (inputs), 2x Euro-block (3p) (inputs), 2x XLR3 (outputs), 2x Euroblock (3p) (outputs)
Rear panel controls:	1x GND operation switch, Voltage selector.	1x Power on/off switch.	1x Voltage selector, power on/off switch.
Front panel controls:	30x slide potentiometers, 2x LO CUT freq. control, 2x gain level, 2x Range selector switch.	62x slide potentiometers, 2x LO CUT freq. control, 2x HI CUT freq. control, 2x gain level, 2x Range selector switch.	60x slide potentiometers, 2x LO CUT freq. control, 2x gain level, 2x LO CUT switch, 2x bypass switch.
Indicators:	10x vumeter (Green LED), 2x vumeter (Red LED), 1x Power on/off (Green LED).	6x vumeter (Green LED), , 2x vumeter (Red LED), 1x power on/off (Green LED).	12x vumeter (Green LED), 2x vumeter (Yellow LED), 2x vumeter (Red LED), 4x Functions on/off (Green LED).
Main supply:	AC 90-250 V.	AC 110-230 V, 60/50 Hz.	AC 90-250 V.
Power consumption:	12 W.	12 W.	12 W.
Dimensions (WxHxD):	483 x 88 x 215 mm.	483 x 88 x 216 mm.	483 x 132 x 215 mm.
Weight:	4.1 kg.	4.1 kg.	4.5 kg.

WEF 1010

Feedback suppressor

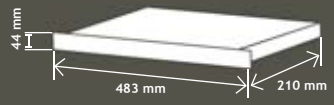
Screenshot of the software.

This dual mono feedback suppressor analyzes frequencies from the input signal and eliminates feedback. It features 12 NOTCH filters with -45 dB attenuation. Sensitivity is adjustable in 15 steps in order to increase or decrease these values.

WEF 1010 includes many functions like channel search selection and detection (L, R or L/R), or copy of values from a channel to another. It features 4 presets and 16 additional positions so user can set up their own filters. The LCD display allows visualizing all these functions. It additionaly features Bypass function and can be connected to MIDI/USB devices for an external control.

Features

- Digital dual mono feedback suppressor.
- 12 Notch filters with -45 dB attenuation.
- 4 presets + 16 user positions.
- LCD display for function visualization.
- Bypass function.
- MIDI interface available.



Technical data	WEF 1010
Number of input channels:	Analog L/R.
Number of output channels:	Analog L/R.
Connectivity:	RS232/MIDI/USB.
Notch filters:	2x 12 filters .
Bandwidth:	1/70, 1/20, 1/10, 1/5 oct. (selectable).
Max attenuation:	-45 dB.
Sensitivity steps:	15 steps.
A/D and D/A resolution:	20 bit.
Processor resolution:	24 x 32 bit.
Input impedance:	47 kΩ.
Max input level:	270 mV / 9 dBu.
Frequency response:	20 Hz - 20 kHz.
S/N ratio:	> 90 dB.
THD+N:	<0.01%.
Max output level:	270 mV / 9 dBu.
Display:	Backlite 2x20 alphanumeric LCD.
Rear panel connectors:	2x XLR3-¼" Jack (input), 2x XLR3-¼" Jack (output), 2x DIN 5p (MIDI input/output), 1x USB, 1x IEC (Main supply).
Rear panel controls:	USB/MIDI selector.
Front panel controls:	2x Encoders (Variation,Navigation), 2x Potentiometers (Input/Output gain control), 4x On/off switches (ENTER, QUIT, PROCESS, Power).
Indicators:	LCD display, 1x QUIT,ENTER (Green LED), 1x CLIP, Power (Red LED).
Main supply:	AC 240 V, 50Hz.
Power consumption:	21 W.
Dimensions (WxHxD):	483 x 44 x 210 mm.
Weight:	2.5 kg.

Rear panel

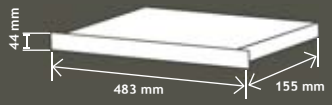
WEF 1010 is suitable for external control thanks to the USB interface and to communicate via MIDI.

WD 416

Audio signal distributor

WD 416 is an audio signal distributor with 4 inputs and 16 outputs. With 4 outputs per input, **WD 416** can operate with 4 independent signals.The device can be considered as '4 signal splitters in one'.

It includes gain control for each input and output, as well as a LED vumeter to visualize the current output level.



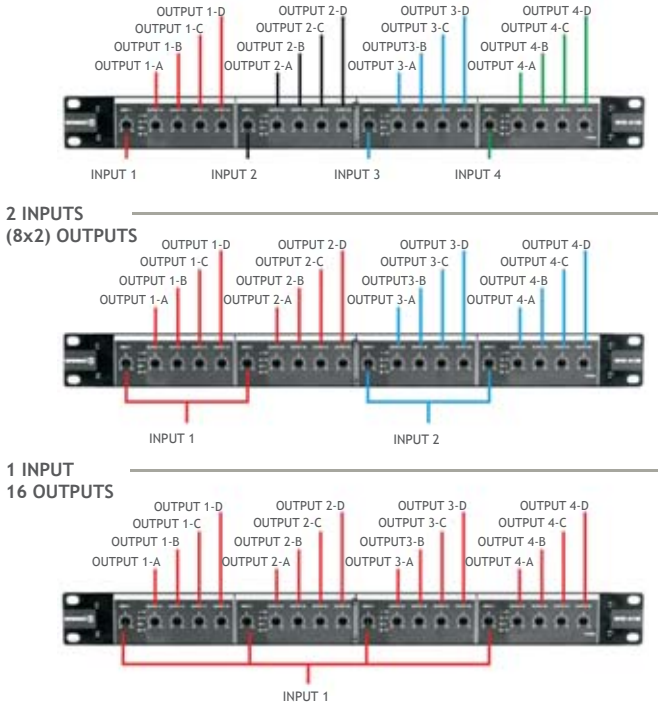
Features

- Audio signal distributor with 4 independent inputs and 4 outputs per channel (total: 16 outputs).
- Balanced inputs and outputs.
- Individual gain control of each channel.
- LED vumeter to visualize current input level.

WD 416 is divided in 4 groups of 4 outputs for an independent control of each group.

Rear panel

Connection Diagram.



Technical data:	WD 416
Number of input channels:	4.
Number of output channels:	16 (4 per input).
Input impedance:	15 kΩ.
Input sensitivity:	150 mV / -13.78 dBu.
Frequency response:	20-20 kHz (-0.5 dB).
S/N ratio:	86 dB.
Dynamic range:	>105 dB.
THD+N:	5%.
Rear panel connectors:	4 x Euroblock 3pin (input), 16 x Euroblock 3pin (output), 1 x IEC (main supply).
Front panel controls/connectors:	4 x Input gain trimmers, 16 x Output gain trimmers.
Indicators:	8 x vumeter (green LED), 4 x vumeter (yellow LED), 4 x vumeter (red LED), 1 x power On/Off (red LED).
Main supply:	AC 115/230V, 60/50 Hz.
Power consumption:	18 W.
Dimensions:	483 x 44 x 155 mm.
Weight:	2.55 kg.

WD 421

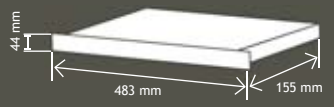
Audio signal distributor

This audio distributor is very useful to supply several audio devices with only one audio source. Its 2 operating modes allow working with mono or stereo signals. Output level can be controlled independently.

WD 421 perfectly adapts itself to different impedances, ensuring that output signal level is at least equal to input signal level. It avoids any undesired attenuation and features a LED vumeter to visualize current input level.

Features

- Audio signal distributor with 2 inputs and 8 outputs.
- Two operating modes: stereo input with 4 stereo outputs / mono input with 8 mono ouputs.
- Individual gain control of each channel.
- Balanced link output for interconnection between several units.
- LED vumeter to visualize current input level.



Technical data	WD 421
Number of input channels:	2.
Number of output channels:	8 (mono), 4 (stereo).
Input impedance:	20 kΩ balanced, 10 kΩ unbalanced.
Frequency response:	20 Hz - 20 kHz.
S/N ratio:	> 103 dB.
Dynamic range:	118 dB.
THD+N:	<0.03%.
Rear panel connectors:	2 x XLR3 (input), 8 x XLR3 (output), 2 x XLR3 (Link), 1 x DIN 3pin (Main supply).
Rear controls:	Output mode selector.
Front controls:	8 x output gain control.
Indicators:	8 x vumeter (green LED), 4 x vumeter (yellow LED), 4 x vumeter (red LED), 2 x operating mode (red LED), 1 x power On/Off (red LED).
Main supply:	AC 2 x 18 V, 500 mA.
Power consumption:	36 W.
Dimensions:	483 x 44 x 155 mm.
Weight:	2.55 kg.

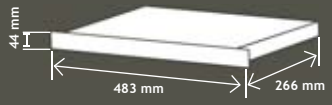
Rear panel

MULTIPLAYER 2

Audio player

Designed in a 1 HU rack enclosure, this useful audio player features many input sources, being adequate for new storage devices.
In addition to traditional CDs, it perfectly plays MP3 from CD-R, CD-RW and external storage devices connected by USB and SD cards. This versatility let users choose the storage devices that they want to use.

Multiplayer 2 allows to manage audio easily. It includes several operating modes (Random, Play all, Repeat, Prog, Mute, etc.) and an intuitive search system for folders and tracks. The ID3 TAG visualization for MP3 mode provides a full information about the tracks.



Features

- Audio player with SD/CD/CD-R/CD-RW/MP3/USB MP3 interfaces.
- USB/SD slots.
- 40 seconds Anti-shock buffer for CD-player.
- Easy searching function for files and folders.
- Operating modes: Random/Play all, Repeat.
- Prog and Mute modes.
- ID3 TAG visualization.

USB and SD audio inputs.

Buttons for operating modes and functions.

Rear panel

Technical data	MULTIPLAYER 2
Audio Format:	Audio CD, MP3.
Disc Format:	CD/CD-R/CD-RW.
Disc Dimensions:	12 cm.
Addition audio inputs:	USB port + SD card slot.
Anti-shock buffer memory:	40 seconds.
MP3 Decoding:	16 / 22.05 / 24 / 32 / 44.1 / 48 kHz sampling.
Instant start:	0.015 seconds.
Track Selection:	Alphanumeric track search.
Oversampling Rate:	8 Times.
Sampling Frequency:	44.1 kHz.
S/N Ratio:	100 dB.
THD+N:	<0.05 %.
Dynamic Range:	96 dB.
Channel separation:	50 dB (1 kHz).
Output level:	1V RMS.
Display:	LCD Backlite 2x20 characters.
Rear Panel connectors:	1x Dual RCA Auido output 1x 2-pole (Main supply).
Rear Panel controls:	Voltage selector.
Front Panel controls:	1 x CD slot, USB port, SD card slot, remote sensor, 10 x quick access buttons, 14 x function buttons (Play, Prog, Pitch, folder ...).
Indicators:	LCD display, 1 x Power On/Off (Green LED).
Main supply:	AC 115/230 V, 60/50 Hz.
Power consumption:	60 W.
Dimensions:	483 x 44 x 266 mm.
Weight:	2.5 kg.
Included Accesories:	Remote control, L/R RCA-RCA audio cable, Main supply cable, backside rubber pieces.

WSE 81

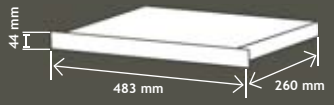
Start sequencer and power distributor

USB port for flex lamp connection (included).

This start sequencer / 8 output power distributor allows sequential start of loads for all inputs with 1 second interval. The device is protected from overloads thanks to its 63 A circuit breaker.

Each channel has its own On/Off switch and a maximum load of 10 A per channel. Bypass function enables or disables sequence and supplies all the outputs. An additional socket is available on front panel (no integrated on start sequence) to supply small units.

LED lights indicate the state of the devices connected to **WSE 81** and a USB port allows the connection of a standard lamp (included). Using the Link connection, users can link various devices and realize a general start sequence.



Features

- Start sequencer and 8 output power distributor.
- Individual On/Off switch for each channel.
- Bypass function.
- LED indicator for each channel.
- Link input for interconnection between several units.
- Additional main supply for small device connection.
- Protections from overloads with 63 A circuit breaker.

63 A circuit breaker and Link input to group several units.

Technical data	WSE 81
Number of outputs:	8.
Max. output load:	10 A per output.
Max. total load:	63 A.
Sequence time:	1 second between outputs.
Protections:	1 x bipolar circuit breaker 400 V 63 A.
Rear panel connectors/controls:	8 x power entry connector, 2 x link function (¼" Jack), 1 x 63 A circuit breaker, 1 x earth screw.
Front panel connectors/controls:	1 x Power entry connector, USB socket (for lamp), 8 x output push buttons, 1 x By pass push button.
Front panel indicators:	8 x channel active (Green LED), 1 x plugin, 1 x By pass (Red LED), 1 x Power on/off (Green LED).
Main supply:	AC 220-240 V, 60/50 Hz.
Power consumption:	14 kW (max.).
Dimensions:	483 x 44 x 260 mm.
Weight:	1.8 kg.
Included Accesories:	USB goosenck LED lamp.

Rear panel

CLUB MASTER 5

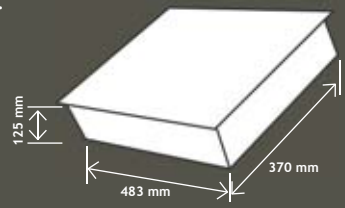
Audio mixer

Designed in a 19” rack enclosure, this professional mixer stands up for it 8 input channels and many sources available (Mic/Phono/Line/Aux). The direct input on front panel is very useful because users can connect an external audio player without having to modify rear connections. This is an interesting solution for fixed installations like hotel ballrooms which organize different kind of events, because it provides maximum versatility to the installation.

For a precise control of audio mix, each channel features 3 band equalizer, 100 mm faders and individual gain. Additionaly, any performance can be recorded with or without Priority Mic channel.

Features

- Professional 8 input mixer.
- 7 stereo channels with 4 selectable input sources (Mic/Phono/Line/Aux).
- Direct input available on front panel (channel 8).
- 1 exclusive Mic input with priority.
- Designed in a 8 HU rack enclosure.
- 100 mm slide faders.
- 2 independent stereo Master outputs.
- PFL indicator.
- Crossover function over all channels.
- Rec output for performance recording (with or without priority Mic).
- Monitor output.



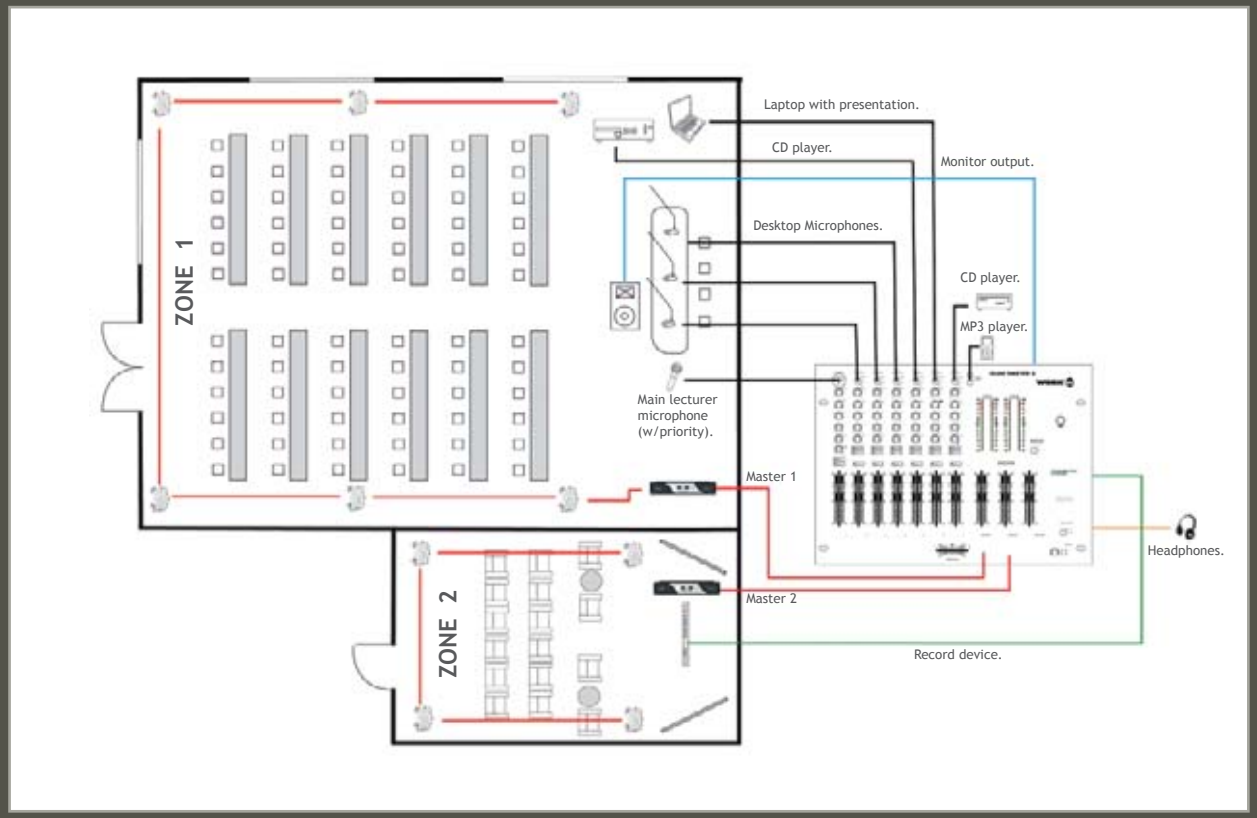
Rear panel

Useful Rec output to record a performance with or without Priority Mic channel.

A direct Line input is available on front channel to instantly connect any external audio player.

The input of each channel can be selected directly from the front panel, taking advantage of the many sources available.

For a perfect control of the mix, each channel features a 3 band equalizer, source selector, individual gain control, crossover selection and 100 mm slide fader.



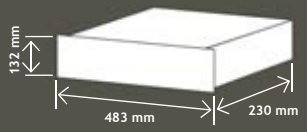
Conference room installation taking advantage of the 2 masters function. One output is amplified for the conference room speaker system and the other master output is driven to an annex meeting room.

Technical data	CLUB MASTER 5	Technical data	CLUB MASTER 5
Number of input channels:	1 mono + 7 stereo.	Master 1-2 Max. level:	20 dB.
Type of input channels:	1 Mic (with talkover), 7 Mic/Phono/Aux/Line.	Rec output Max. level:	20 dB.
MIC inputs impedance/sensitivity:	10 kΩ, 20 mV / -30 dBu.	Phones output min. load:	20 dB @ 32 Ω.
LINE/AUX inputs impedance/sensitivity:	10 kΩ, 190 mV / -12 dBu.	Monitor output max. level:	20 dB.
PHONO inputs impedance/sensitivity:	10 kΩ, 40 mV / -24 dBu.	Rear panel connectors/controls:	20 x Dual RCA (inputs), 8 x Combo XLR3 - ¼" Jack (Inputs), 4 x XLR3 (Master outputs), 1 x Dual RCA (Monitor Output), (Record), 1 x IEC (Main supply).
Tone Control:			
Bass Bandwidth/Gain:	80 Hz, -15 dB to +15 dB.		
Middle Bandwidth/Gain:	2 kHz, -15 dB to +15 dB.	Front panel connectors:	1 x COMBO XLR3-¼" Jack (Input), 1 x Dual RCA (Input), 1 x Dual RCA (Record output), ¼" Jack (Phones output).
Treble Bandwidth/Gain:	12 kHz, -15 dB to +15 dB.		
Frequency Response:	20 Hz - 20 kHz.	Main supply:	AC 115/230 V 50/60 Hz.
THD+N:	<0.01 %.	Power consumption:	20 W.
Crosstalk:	>75 dB.	Dimensions:	483 x 370 x 125 mm.
Type of output:	2 x Dual Master, 1x Monitor, Record, Phones.	Weight:	7 kg.

CLUB MASTER 1

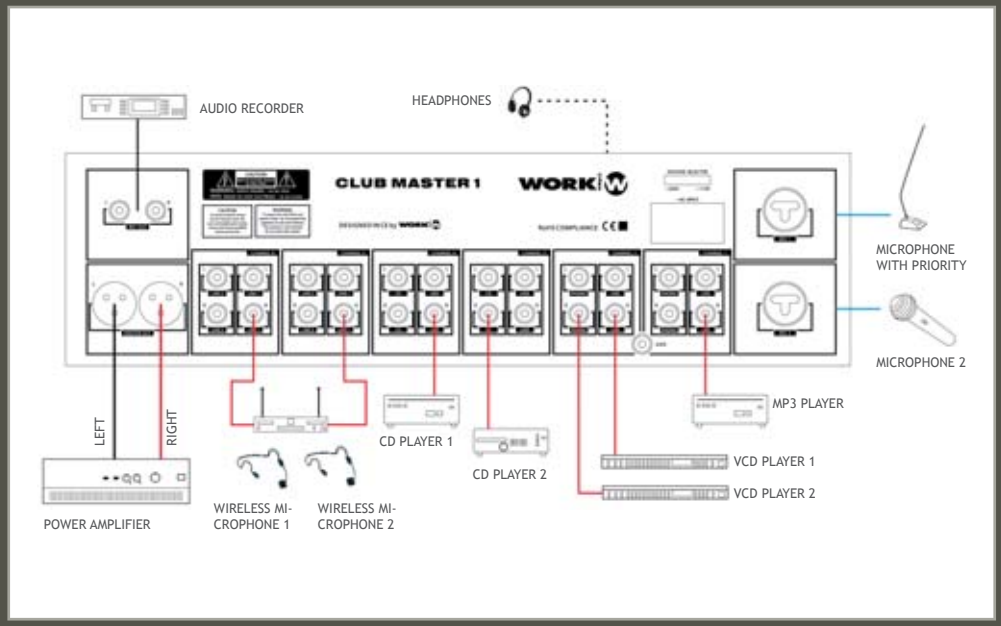
Audio mixer

Club Master 1 offers all the features of a professional mixer in only 3 HU rack units.



Each of the 6 stereo channels has its own 3-band equalizer and balance, in order to control the input sources available (Line/Phono, Line/CD, Line1/Line2).

The two Mic inputs with priority allow to shut down music during speaker messages. Slide faders ensure the intuitive control of each channel. **Club Master 1** also features options like Rec and headphone outputs, being an interesting mixer for many small/medium size installations.



Features

- 8 input channel mixer (2 Mic inputs with priority).
- 6 stereo channels with selectable input source (Line/Phono, Line/CD, Line1/Line2).
- Mic inputs with front and rear connectors.
- 3 band equalizer for stereo channels and balance for Master section.
- Individual gain level and PAN function.
- 70 mm slide faders.
- LED vumeter with 10 segments.
- Headphone output with gain level.
- Rec output.
- Suitable for small/medium-size installations.

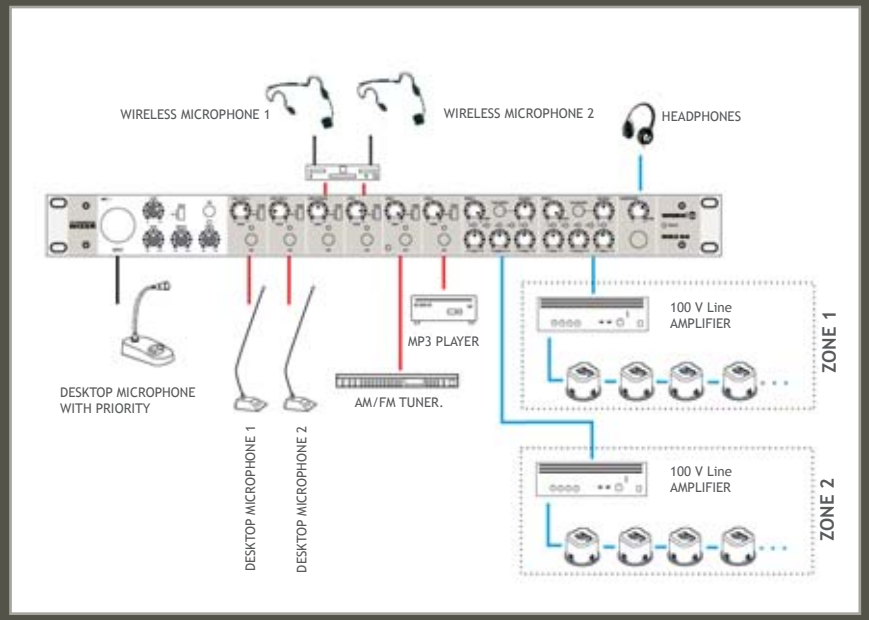
Rear panel

Master output control.

Technical data	CLUB MASTER 1
Number of input channels:	2 mono + 6 stereo.
Type of input channels:	2 Mic (with priority), 2 Line/Phono, 2 Line/CD, 2 Line/Line.
MIC inputs impedance/sensitivity:	10 kΩ, 10 mV / -33 dBu.
LINE/AUX inputs impedance/sensitivity:	47 kΩ, 770 mV / 0 dBu.
PHONO inputs impedance/sensitivity:	10 kΩ, 50 mV / -23 dBu.
Tone Control:	
Bass Bandwidth/Gain:	80 Hz, -15 dB to +15 dB.
Middle Bandwidth/Gain:	2 kHz, -15 dB to +15 dB.
Treble Bandwidth/Gain:	12 kHz, -15 dB to +15 dB.
Frequency Response:	20 Hz - 20 kHz.
THD+N:	<0.01%.
Crosstalk:	>75 dB.
Type of output:	1 x Dual Master, 1x Record, Phones.
Master 1-2 Max. level:	20 dB.
Rec output Max. level:	20 dB.
Phones output min. load:	20 dB @ 32Ω.
Monitor output Max. level:	20 dB.
Rear panel connectors/controls:	12 x Dual RCA (inputs), 2 x Combo XLR3-¼" Jack (inputs), 2 x XLR3 (Master outputs), 1x Dual RCA (Monitor output, record), 1x IEC (main supply).
Front panel connectors:	1 x ¼" Jack (Phones).
Main supply:	AC 115/230 V 50/60 Hz.
Power consumption:	8 W.
Dimensions:	483 x 133 x 230 mm.
Weight:	5.1 kg.

MMX 65

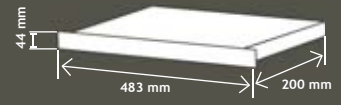
Audio mixer



MMX 65 is a 2 zone audio mixer composed of two independent output zones with their own equalizer.

This versatile device features 6 input channels with source selector and priority for the first Mic channel. Additional functions for voice channel (delay, equalizer, sensitivity adjustment) provide an optimum control of audio mix.

Each input channel can be assigned to zone 1, 2 (or both). This is particularly useful for installations like stores or museums.



Features

- 6 input channel mixer with source selector.
- 6 Line inputs, 1 Phono, 3 Mic.
- Mic 1 input with attenuator, talkover sensitivity adjustment, delay, EQ and gain control.
- Mute function available for all the inputs.
- Two output zones with gain, balance, EQ and mono/stereo selector.
- Headphone output with volume control.

Technical data	MMX 65
Number of input channels:	6 stereo.
Type of input channels:	3 Mic (Mic 1 with talkover), 6 Line, 1 Phono.
MIC inputs impedance/sensitivity:	10K Ω / 15 mV / -34.25 dBu.
LINE/AUX inputs impedance/sensitivity:	10K Ω / 14 mV / -34.85 dBu.
PHONO inputs impedance/sensitivity:	10K Ω / 14 mV / -34.85 dBu.
Tone Control:	
Bass Bandwidth/Gain:	± 20 dB.
Middle Bandwidth/Gain:	± 15 dB.
Treble Bandwidth/Gain:	± 15 dB.
Frequency Response:	22 Hz - 22 kHz.
THD+N:	<0,01%.
Type of output:	2x Zone A (balanced), 2x Zone B (balanced), 1x Zone A (unbalanced), 1x Zone B (unbalanced), 1xRecord (unbalanced).
Phones output Min. load/power:	47 Ω / 0.5 W.
Rear panel connectors/controls:	3x Combo XLR3 - ¼" Jack (inputs), 4 x Dual RCA (inputs), 2x XLR3 (balanced output Zone A), 2x ¼" Jack (balanced output Zone B), 1x Dual RCA (Unbalanced output Zone A), (Unbalanced output Zone B), (Record), 1x DIN 3p (main supply). 2x Mic/Line switch, 2x MO/ST switch, 1x talkover level switch, 1x Phono/Line switch, 1x Master gain reduction selector,1x talkover sensitivity, 1 x delay time control.
Front panel connectors:	1 x COMBO XLR3 - ¼" Jack (input), 1 x ¼" Jack (Phones).
Main supply:	AC 2 x 15.5 V.
Power consumption:	12 W.
Dimensions:	483 x 44 x 200 mm.
Weight:	2.2 kg.

Rear panel

Zone selector for each input.

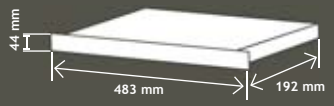
Master section with zone control and equalizer.

Balanced outputs and Master gain control.

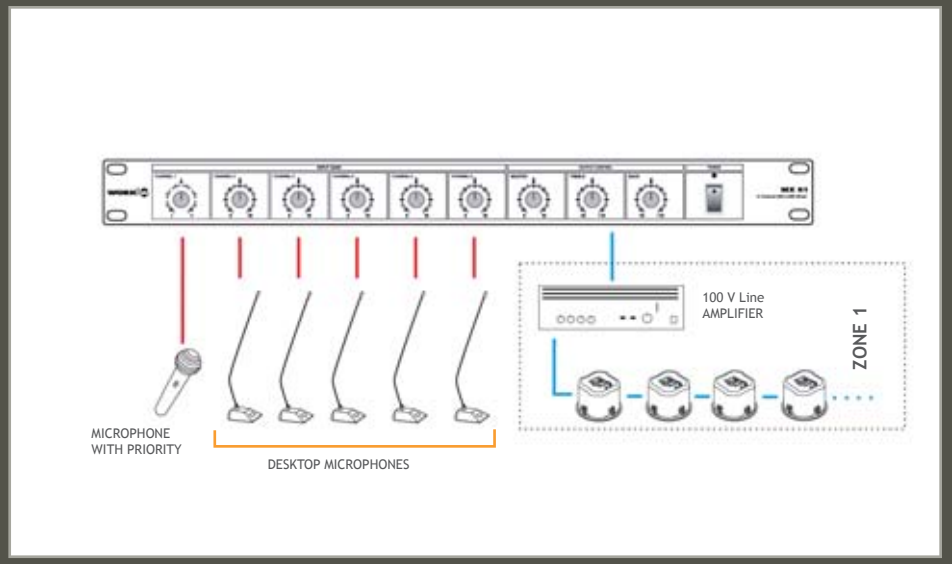
MX 61

Audio mixer

MX 61 is a 6 channel mixer that allows connecting Mic and Line signals on each input channel. It has been designed to be easily integrated in any installation, thanks to its 19” 1 HU rack format.



For an optimum control of audio, **MX 61** features a 2 band equalizer on Master section, individual gain control on each channel and general volume control for mix. There is a switch on rear panel to select output level (HI/Low) and adjust it to a power unit input.



Features

- 6 Mic/Line input mixer.
- Balanced Mic/Line inputs for each channel.
- 2 band equalizer for Master section.
- Individual gain control and Master.
- Switch for output level selection (Hi/Low).
- Suitable for almost any commercial audio installation.

Rear panel

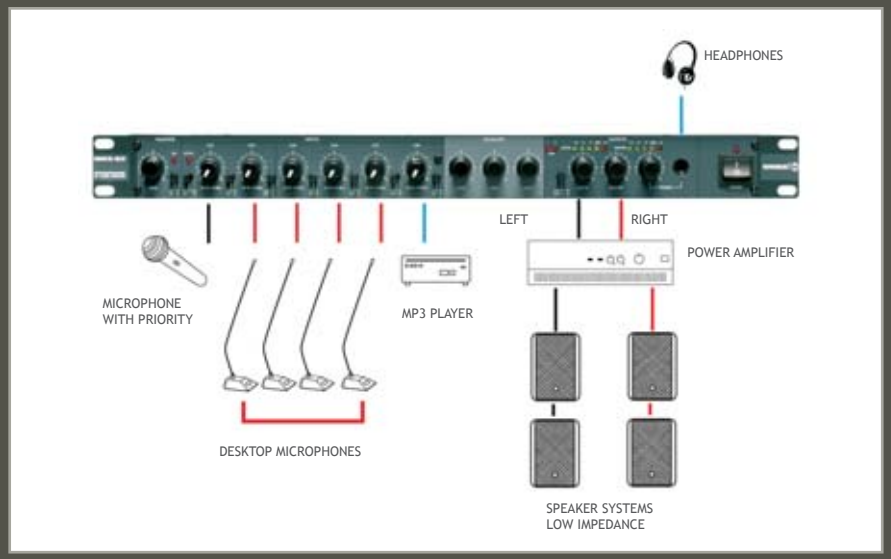
Individual gain control on each channel.

Two band equalizer on Master section.

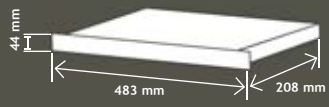
Technical data	MX 61
Number of input channels:	6 mono.
Type of input channels:	6 Mic/Line (3 inputs with 15 V phantom power).
MIC inputs impedance/sensitivity:	1 kΩ / 1.4 mV / -54.85 dBu.
LINE/AUX inputs impedance/sensitivity:	10 kΩ / 4.5 mV / -24.71 dBu.
Tone Control:	
Bass Bandwidth/Gain:	100 Hz/ ± 12 dB.
Treble Bandwidth/Gain:	10 kHz/ ± 12 dB.
Frequency Response:	20 Hz - 22 kHz.
THD+N:	<0,1%.
Type of output:	1 x Master (balanced), 1 x Master (unbalanced).
Master 1-2 Max. level:	(+25 dBU) (balanced-unbalanced).
Rear panel connectors/controls:	6 x XLR3 (Balanced MIC inputs), 6 x ¼” Jack (unbalanced Line inputs), 1 x XLR3(Balanced output), 1 x ¼” Jack (unbalanced output), 1x IEC (main supply). 1 xHi/Low output level switch, 1x voltage selector.
Main supply:	AC 115/230 V, 60/50 Hz.
Power consumption:	10 W.
Dimensions:	483 x 44 x 192 mm.
Weight:	2.42 kg.

MMX 60

Audio mixer



Thanks to its 6 input channels and 3 band equalizer in the Master section, **MMX 60** ensures the perfect control of audio, being a great solution for pro users. Output levels and equalization are easily controlled.



Thanks to the Mic/Line selector, separated Master outputs and talkover function (for the channel 1, or both 1 and 2), user can select and control the different zones.

Features

- 6 input mixer.
- Mic/Line selector for each channel.
- Gain control and balance for each channel.
- 3 band equalizer for Master section.
- Talkover function with level control.
- Separate Left/Right Master outputs.
- Mono/Stereo function.
- Phantom supply (12 V) for microphones.
- LED vumeter with peak indicator.
- Suitable for large size installations.

Technical data	MMX 60
Number of input channels:	6 stereo
Type of input channels:	6 Mic/Line
MIC inputs impedance/sensitivity:	10 kΩ / 100 mV / -17.78 dBu.
LINE/AUX inputs impedance/sensitivity:	10 kΩ / 100 mV / -17.78 dBu.
Tone Control:	
Bass Bandwidth/Gain:	50 Hz, -12 dB to +12 dB.
Middle Bandwidth/Gain:	1 kHz, -12 dB to +12 dB.
Treble Bandwidth/Gain:	10 kHz, -12 dB to +12 dB.
Frequency Response:	20 Hz - 20 kHz.
THD+N:	<0,1%.
Type of output:	2 x Master (balanced), 1 x Master (unbalanced), 1 x Record (unbalanced).
Master 1-2 Max. level:	1V / 600 Ω (balanced-unbalanced).
Rec output Max. level:	310 mV /600 Ω (unbalanced).
Phones output Min. load/power:	2x 8 Ω.
Rear panel connectors/controls:	6 x Dual RCA (inputs), 6 x XLR3 (inputs), 2 x XLR3 (balanced output), 1x dual RCA (unbalanced output record).
Front panel connectors:	¼" Jack (Phones).
Main supply:	AC 230 V, 50 Hz.
Power consumption:	12 W.
Dimensions:	483 x 44 x 208 mm.
Weight:	3.18 kg.

Rear panel

Talkover function for channel 1 or 1+2 and Mic/Line input source selector on each channel.

Separate L/R Master control.
Headphone input.

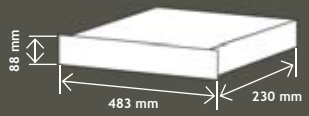
ANALOG MATRIX 8

Multizone stereo mixer

Analog Matrix 8 is a multizone stereo mixer built in a matrix system configuration of 8 inputs and 8 outputs.
It is composed of two main parts, each one with a 8 channel stereo mixer. This allows the creation of many input/output configurations.

The 8 outputs are divided in 4 groups, so it can supply 4 different zones with one stereo output and different input signals.

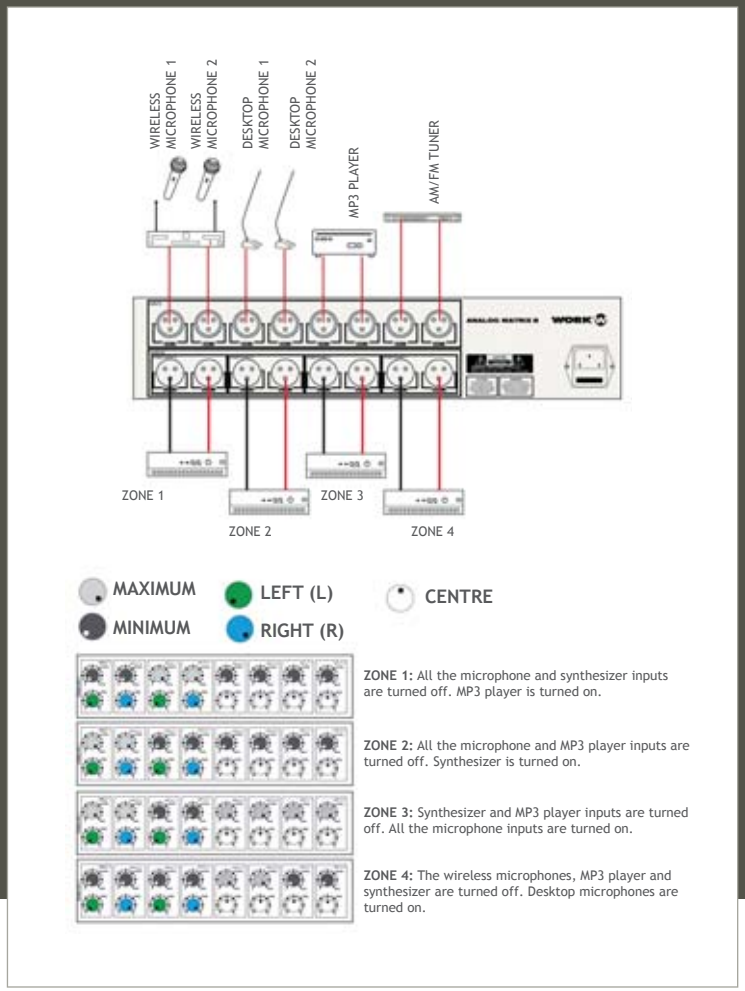
Analog Matrix 8 can be used for audio distribution in different rooms with an independent control of each one, without changing cable configuration (user just has to use gain controls). It is also possible to get 8 outputs with their own configuration because each input has its gain control and PAN function.



Features

- Multizone stereo mixer (4 zones) based on a 8x8 matrix system.
- Configuration: 2 stereo mixers of 8 channels.
- 4/8 balanced outputs.
- Individual gain control and PAN control for each output.
- Ideal for audio distribution in several areas with an independent control of each channel.

Rear panel


WIRELESS MICROPHONE 1
WIRELESS MICROPHONE 2
DESKTOP MICROPHONE 1
DESKTOP MICROPHONE 2
MP3 PLAYER
AM/FM TUNER
ZONE 1
ZONE 2
ZONE 3
ZONE 4
MAXIMUM
MINIMUM
LEFT (L)
RIGHT (R)
CENTRE
ZONE 1: All the microphone and synthesizer inputs are turned off. MP3 player is turned on.
ZONE 2: All the microphone and MP3 player inputs are turned off. Synthesizer is turned on.
ZONE 3: Synthesizer and MP3 player inputs are turned off. All the microphone inputs are turned on.
ZONE 4: The wireless microphones, MP3 player and synthesizer are turned off. Desktop microphones are turned on.

Thanks to the gain potenciometers of each input, it is possible to control each stereo output group (PA ZONE 1, 2, 3, RECORDER). Thus, a same input signal can be sent to several outputs at the same time. It is also possible to change input sources with gain controls.

Technical data	ANALOG MATRIX 8
Mono inputs:	Balanced XLR3.
Input impedance:	10 kΩ.
Frequency response:	20 Hz - 20 kHz +/- 1dB.
Gain:	-75 dB - +10 dB.
Distortion:	< 0,01 %.
Outputs:	Balanced XLR3.
Main supply:	AC 230 V, 50 Hz.
Dimensions (WxHxD):	483 x 88 x 230 mm.
Weight:	3.6 kg.

WAP series

Portable wireless PA amplifiers

This series of portable amplifiers is designed for audio reproduction in schools and any other installations without fixed sound systems. The series is suitable for almost any installation requirements, with amplifier power from 50 to 120 W. Thanks to its built-in battery, it can be used anywhere.

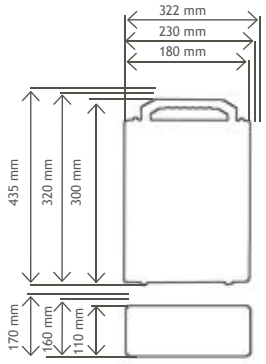
It is perfectly adapted to new storage devices. If you still use your old CD/Cassette player, time has gone to change... The **WAP series** includes the latest technology for audio reproduction. Thanks to its USB port and SD slot, now all your music and audio content fits in your pocket! Many functions are available for audio adjustments. In addition, its Aux input allows connecting external devices (CD player, etc.).

Each model comes with a handheld microphone, a headset microphone, a transmitter, a lavalier microphone and a power cable. Users can do their presentation with total freedom of movement; component quality ensures perfect hearing.

Features

- Portable wireless PA amplifiers for installations without sonorization.
- Several power outputs available, from 50 to 120 W depending on model.
- USB port and SD slot to play files from external storage devices.
- Aux input for external devices.
- Digital ECHO and Tone control.
- Handheld microphone, headset microphone transmitter, lavalier microphone and power cable included with each unit.

Technical data	WAP 305	WAP 505	WAP 650
Elements:	6.5” woofer full range (4 Ω).	6.5” woofer full range (4 Ω).	8” woofer full range (2 Ω) / 1.5” piezoelectric driver.
Amplifier power:	50 W max.	75 W max.	120 W max.
Aux. inputs:	1.	1.	3.
Frequency range:	VHF band (4 different groups).	VHF band (4 different groups).	VHF band (8 different groups).
Range:	35 m.	35 m.	35 m.
Channels:	Mono channel.	Double channel.	Double channel.
Sensitivity:	10 dB uV (S/N 60 dB).	10 dB uV (S/N 60 dB).	10 dB uV (S/N 60 dB).
Oscillating mode:	± 0.005% quartz oscillating locked.	± 0.005% quartz oscillating locked.	± 0.005% quartz oscillating locked.
T.H.D.:	Less than 5%.	Less than 5%.	Less than 5%.
Working temperature:	25º C to 45º C.	25º C to 45º C.	25º C to 45º C.
Main supply:	AC 220 V, 50 Hz - 1.0 A; DC 12 V DC (1.2 AH rechargeable battery; external power supply not included).	AC 220 V, 50 Hz - 1.0 A; DC 12 V DC (2.2 AH rechargeable battery; external power supply not included).	AC 220 V, 50 Hz - 1.0 A; DC 12 V DC (7 AH rechargeable battery; external power supply not included).
Dimensions (WxHxD):	180 x 300 x 110 mm.	230 x 320 x 160 mm.	322 x 435 x 170 mm.
Weight:	2.4 kg.	4 kg.	7.2 kg.



NEO 3

Installation loudspeaker

NEO 3 is a ultra-compact loudspeaker directly inspired by the first models of the NEO series. It features a high performing driver which makes possible the reproduction of a wide range of frequencies.

NEO 3 specially stands out because it is possible to use the same model in either 100 V Line and 8 ohm installations. When the loudspeaker is connected to low impedance, audio doesn't go through the transformer, in order to maintain a high quality level.

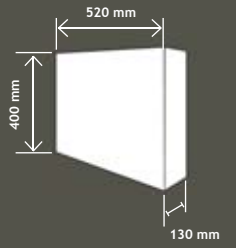
Integrators can easily install NEO 3 loudspeaker on the different parts of the installation, thanks to a new bracket specially designed for this model.

Features

- Ultra-compact loudspeaker designed for small and medium size installations.
- Elegant shape and minimalist design for a easy integration in any installation.
- Suitable with 10/100 V Line and low impedance (8 Ω) installations.
- Audio signal directly sent to loudpeaker in low impedance configuration.
- High performing driver which allows the reproduction of a wide range of frequencies.

NEO SUB 8 A

Subwoffer specially designed for the NEO series



NEO Sub 8 A is the perfect complement for the loudspeakers from the NEO series. This self-powered subwoofer with balanced inputs can be used as an element of the decoration in an installation. It can be hung to walls vertically or horizontally and it is possible to hide it with a simple painting.

NEO 3 and **NEO Sub 8 A**: the perfect combination for medium size audio installation. WORK presents **NEO 3** and **NEO Sub 8 A**, two new products with an elegant design. Both products have been designed for medium size audio installations like shops or lounge bars.

Features

- Self-powered subwoofer.
- Can be used in horizontal and vertical position.
- Easily hiden behind a simple painting.
- The perfect complement for the NEO loudspeakers.

Rear view

Gain and frequency controls located behind the subwoofer.

Technical data	NEO SUB 8 A
Type:	Self-powered subwoofer.
Elements:	8” woofer.
Amplifier power:	60 W RMS - 120 W program.
Impedance:	2 outputs (4 Ω + 4 Ω).
Frequency response:	40 Hz -160 Hz.
Input sensitivity:	175 mV / -13 dBu.
Crossover frequency:	50 Hz to 150 Hz (selectable).
Material (housing):	MDF wood.
Dimensions (WxHxD):	520 x 400 x 130 mm.
Weight:	8.5 kg.

NEO series

Installation loudspeakers

Five models for all your projects!

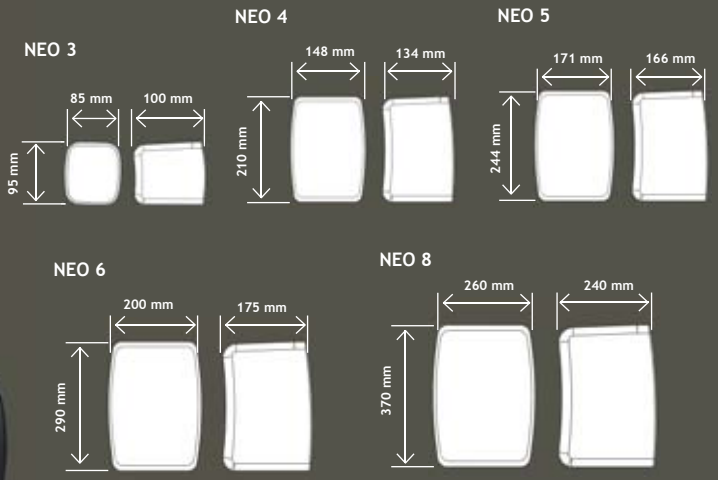
Loudspeakers from the **NEO series** associate sound quality and elegant design for a perfect integration in all your projects. Five models are available with different power and dimensions.

To fit any installation requirements, NEO loudspeakers are suitable for low impedance (8 Ω) and high voltage installations (100 V). The wall-mount bracket, specially designed for the **NEO series**, allows a quick and easy installation. Speakers are easily oriented to the optimum angle for the desired coverage. The aluminium grille is designed to withstand humid environments.

Contractors take advantage of the modern line, black or white finish and elegant design of NEO loudspeakers, which make them suitable for any design projects.

Features

- Passive two way loudspeakers for fixed installation.
- Available with black and white finish.
- Elegant shape and modern design for a easy integration.
- Included bracket designed for a fast and easy mounting operation.
- Suitable for low impedance (8 Ω) and high voltage installations (100 V).



NEO 4 NEO 6 NEO 8 NEO 5 NEO 3

Technical data	NEO 3	NEO 4	NEO 5	NEO 6	NEO 8
Type:	Full range loudspeaker.	2 way passive loudspeaker.	2 way passive loudspeaker.	2 way passive loudspeaker.	2 way passive loudspeaker.
Elements:	2.5" speaker.	4" woofer + 0.5" TWT.	5¼" woofer + 0.5" TWT.	6½" woofer + 1" TWT.	8" woofer + 1" TWT.
Power handling (100 V Line):	10 W (1 kΩ).	16 W (625 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω) / 2 W (5 kΩ).	16 W (625 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω) / 2 W (5 kΩ).	32 W (312 Ω) / 16 W (625 Ω) / 8 W (1k2 Ω) / 4 W (2k5 Ω).	30 W (312 Ω) / 16 W (625 Ω) / 8 W (1k2 Ω) / 4 W (2k5 Ω).
(*) Power handling (70 V Line):	5 W (980 Ω).	8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω) / 1 W (4k9 kΩ).	8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω) / 1 W (4k9 kΩ).	16 W (326 Ω) / 8 W (612 Ω) / 4 W (12k23 Ω) / 2 W (2k45 kΩ).	16 W (326 Ω) / 8 W (612 Ω) / 4 W (12k23 Ω) / 2 W (2k45 kΩ).
Power handling (8 Ω):	50 W RMS (with 120 Hz HPF).	30 W at 8 Ω.	40 W at 8 Ω.	60 W at 8 Ω.	70 W at 8 Ω.
Input connectors:	Euroblock.	Euroblock.	Euroblock.	Euroblock.	Euroblock.
Sensitivity (1W/1m):	87 dB.	89 dB.	91 dB.	92 dB.	93 dB.
Max SPL:	100 dB.	103 dB.	107 dB.	109 dB.	111 dB.
Frequency response:	110 Hz - 20 kHz.	70 Hz - 20 kHz.	60 Hz - 20 kHz.	55 Hz - 20 kHz.	52 Hz -20 kHz.
RAL colour code:	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).
Material (housing):	Polypropylene plastic.	Polypropylene plastic.	Polypropylene plastic.	Polypropylene plastic.	Polypropylene plastic.
Material (grille):	Aluminium.	Aluminium.	Aluminium.	Aluminium.	Aluminium.
Dimensions (WxHxD):	85 x 95 x 100 mm.	148 x 210 x 134 mm.	171 x 244 x 166 mm.	200 x 290 x 175 mm.	260 x 370 x 240 mm.
Weight:	0.5 kg.	1.95 kg each.	2.4 kg each.	3.1 kg each.	4.95 kg each.

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

Rear view

NEO A series

Installation loudspeakers

The **NEO A series** is composed of three self-powered models which complete the **NEO series** for maximum convenience and flexibility. They feature a two channel class D amplifier, bass and treble tone controls, RCA, 3.5mm mini-jack inputs and a powered output for a passive speaker (included).

Each self-powered model is supplied as a complete pair, as it comes with a passive loudspeaker and cables for connection (except for the NEO 8 A).

NEO 8 A

NEO 5 A

NEO 6 A

Discover the new NEO 8 A.

The NEO 8 A is the latest model of the NEO A series. This powerful louspeaker differentiates itself from the others as its amplifier is exlusively dedicated to this unit. That is why it doesn't come with a passive loudspeaker.

Features

- Self powered two way loudspeakers designed for fixed installations.
- Class D amplifier for minimal weight and heat.
- Available with black and white finish.
- Included wall-mount bracket with fast mounting system.
- Each unit comes with a passive loudspeaker (except for the NEO 8 A).

The wall-mount bracket allows quick and easy installation. Speakers are easily oriented to the optimum angle for the desired coverage.

Technical data	NEO 5 A	NEO 6 A	NEO 8 A
Type:	2 way self-powered loudspeaker.	2 way self-powered loudspeaker.	2 way self-powered loudspeaker.
Elements:	5¼" woofer + 0.5" TWT.	6½" woofer + 1" TWT.	8" woofer + 1" TWT.
Amplifier power:	2 x 25 W at 4 Ω.	2 x 30 W at 4 Ω.	40 W.
Input connectors:	RCA - Mini Jack 3.5 mm / Euroblock.	RCA - Mini Jack 3.5 mm / Euroblock.	RCA - Mini Jack 3.5 mm
Input sensitivity:	1 V / 2.21 dBu.	1 V / 2.21 dBu.	1 V / 2.21 dBu.
Frequency response:	60 Hz -20 kHz.	55 Hz - 20 kHz.	50 Hz - 20 kHz.
RAL colour code:	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).
Material (housing):	Polypropylene plastic.	Polypropylene plastic.	Polypropylene plastic.
Material (grille):	Aluminium.	Aluminium.	Aluminium.
Main supply:	AC 115/230 V, 60/50 Hz.	AC 115/230 V, 60/50 Hz.	AC 115/230 V, 60/50 Hz.
Dimensions (WxHxD):	171 x 244 x 166 mm.	200 x 290 x 175 mm.	260 x 370 x 240 mm.
Weight:	4.4 kg each.	5.1 kg each.	5.46 kg each.

STUDIO series

Installation loudspeakers

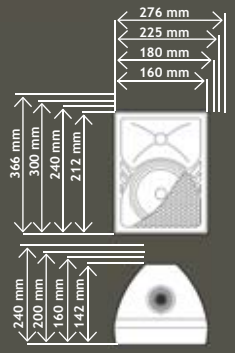
Loudspeakers from the **STUDIO series** are designed for stores, galleries and conference rooms. They are a point of reference for contractors which look for acoustic optimization.

Thanks to several models available and the many power selector positions, the **STUDIO series** is suitable for almost any configuration, being easy to install in small and large areas with several points of audio diffusion.

The STUDIO series is made of high resistance ABS plastic. It is composed of a high performance speaker and a wide angle dispersion (60º x 90º) in order to provide a clear and pure sound for music and speech, whatever the distance between loudspeakers and public.

Features

- Passive two way loudspeakers.
- Wide angle dispersion (60º x 90º).
- Available with black and white finish.
- Lightweight high resistance ABS housing.
- Included wall-mount bracket.
- Suitable for low impedance (8 Ω) and high voltage installations (100 V).



Technical data	STUDIO 20	STUDIO 30	STUDIO 40	STUDIO 50
Type:	Two way passive loudspeaker.	Two way passive loudspeaker.	Two way passive loudspeaker.	Two way passive loudspeaker.
Elements:	4” woofer + TWT.	5” woofer + TWT.	6.5” woofer + TWT.	8” woofer + TWT.
Power handling (100 V Line):	40 W (250 Ω) / 16 W (625 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω) / 2 W (5 kΩ).	45 W (222 Ω) / 16 W (625 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω) / 2 W (5 kΩ).	55 W (181 Ω) / 32 W (312 Ω) / 16 W (625 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω).	65 W (154 Ω) / 32 W (312 Ω) / 16 W (625 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω).
(*) Power handling (70 V Line):	20 W (245 Ω) / 8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω) / 1 W (4k9 Ω).	22 W (222 Ω) / 8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω) / 1 W (4k9 Ω).	28 W (175 Ω) / 16 W (306 Ω) / 8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω).	32 W (153 Ω) / 16 W (306 Ω) / 8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω).
Power handling (low impedance):	30 W at 8 Ω.	40 W at 8 Ω.	60 W at 8 Ω.	70 W at 8 Ω.
Input connectors:	Binding post.	Binding post.	Binding post.	Binding post.
Sensitivity:	73 dB.	74 dB.	73 dB.	72 dB.
Max SPL:	89 dB.	90 dB.	90 dB.	90 dB.
Frequency response:	80 Hz - 18 kHz.	70 Hz - 20 kHz.	70 Hz - 20 kHz.	40 Hz - 20 kHz.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Metal.	Metal.	Metal.	Metal.
Dimensions (WxHxD):	160 x 212 x 142 mm.	180 x 240 x 160 mm.	225 x 300 x 200 mm.	276 x 366 x 240 mm.
Weight:	1.55 kg.	2.7 kg.	4.8 kg.	6.3 kg.

Included bracket.

Optional brackets available.

Omni-directional bracket **SPB-1/E** and Wall-mount bracket **SPB mini.**

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

STUDIO A series

Installation loudspeakers

The STUDIO series, with the advantages of amplification.

STUDIO 40 A and **STUDIO 50 A** complete the range of STUDIO loudspeakers. They feature 2 x 20 W or 2 x 30 W power depending on model and they include two operating modes, being suitable for Mono and Stereo configuration.

A unique device for a better control.

These loudspeakers feature independent volume control with bass and treble tone controls. Input connection is possible by means of Mini Jack or RCA connectors. Thanks to their power connection, they can directly power a passive loudspeaker (included) to expand the system.

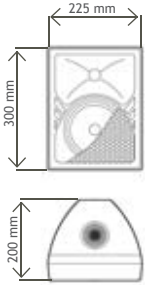
STUDIO 50 A
STUDIO 40 A

Features

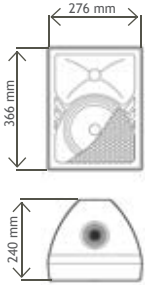
- Self-powered two way loudspeakers for galleries and conference rooms.
- Wide angle dispersion (60º x 90º).
- Mono and Stereo operating modes with low/high tone controls.
- Available with black and white finish.
- Lightweight and compact design.
- Reinforced with high resistance ABS housing.
- Included wall-mount bracket.

A passive model comes with each active loudspeaker.

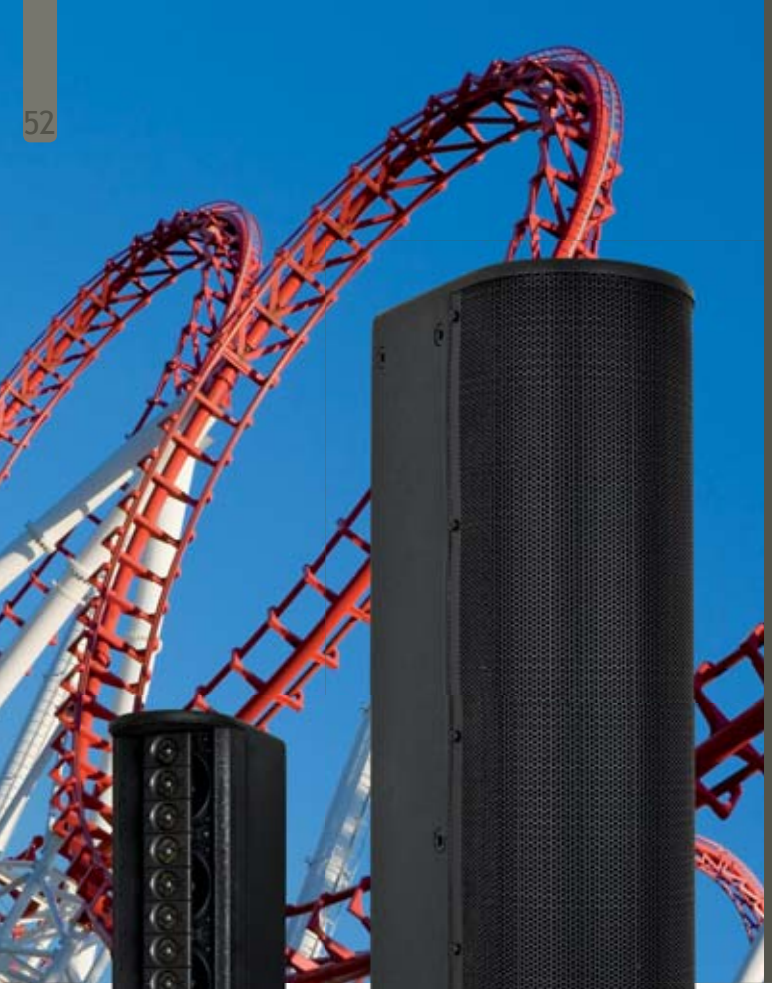
STUDIO 40 A



STUDIO 50 A



Technical data	STUDIO 40 A	STUDIO 50 A
Type:	2 way self-powered loudspeaker.	2 way self-powered loudspeaker.
Elements:	6.5" woofer + TWT.	8" woofer + TWT.
Ammplifier power:	2 x 20 W at 8 Ω.	2 x 30 W at 8 Ω.
Input connectors:	RCA - Mini Jack 3.5 mm / Binding post.	RCA - Mini Jack 3.5 mm / Binding post.
Input sensitivity:	1 V / 2.21 dBu.	1 V / 2.21 dBu.
Frequency response:	60 Hz - 16 kHz.	60 Hz - 16 kHz.
Material (housing):	ABS plastic.	ABS plastic.
Material (grille):	Metal.	Metal.
Main supply:	AC 115/230 V, 60/50 Hz.	AC 115/230 V, 60/50 Hz.
Dimensions (WxHxD):	225 x 300 x 200 mm.	276 x 366 x 240 mm.
Weight:	6.2 kg.	6.8 kg.



CLY 1

Column Line Array

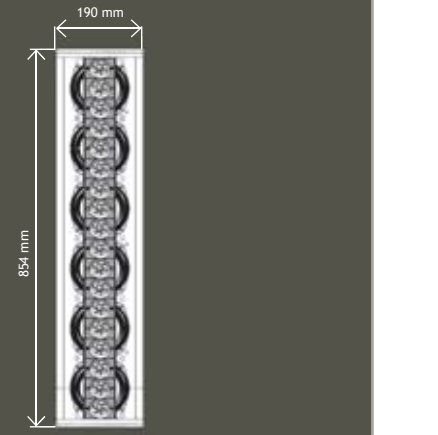
WORK presents CLY 1, its new colum Line Array speaker specially designed for installations with highly reflective interior surfaces like churches, meeting rooms, airports, colleges, etc. It goes unperceived in installations thanks to its slim design (only 190 mm width).

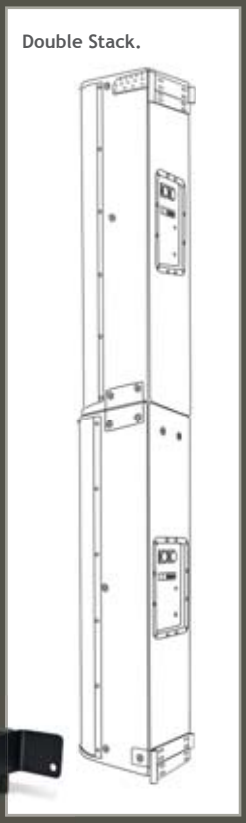
The CLY 1 column line Array is composed of 18 ribbon tweeters and 6 woofers, providing high sensitivity and power handling. All drivers share the same horizontal axis to obtain the best dispersion with a wide horizontal coverage (100º).

An optional side bracket makes possible the combination of several units. This is particularly helpful to increase vertical coverage, throw distance and low pattern control.

Features

- Two way column Line Array.
- Adequate for speech applications (churches, airports, meeting rooms, etc.).
- Slim design with only 190 mm width.
- High sensitivity and power handling.
- Best dispersion and wide horizontal coverage.
- Optional side bracket to group several units (increasing vertical coverage, throw distance and low pattern control).
- Optional wall-mount bracket available.





All drivers share the same horizontal axis to obtain the best dispersion with a wide horizontal coverage (100º).

Technical data	CLY 1
Type:	Two way slim Line Array system.
Elements:	18 x 1" ribbon tweeters + 6 x 5.24" woofers.
Power handling (low frequency):	300 W (60 V) AES/2.
Power handling (high frequency):	300 W (73 V) AES/2.
Impedance:	12 Ω.
Input connectors:	Terminals (screw).
Sensitivity (low frequency):	93 dB.
Sensitivity (high frequency):	107 dB.
Max SPL (low frequency):	117 dB.
Max SPL (high frequency):	131 dB.
Frequency response:	100 Hz - 20 kHz.
Dispersion (H):	100º.
Dispersion (V):	Depending on the height of the Array.
Material (housing):	Marine plywood.
Material (grille):	Aluminium.
Dimensions (WxHxD):	190 x 854 x 230 mm.
Weight:	16.2 kg.

WS series

Subwoofers

WS 1000

WS 1200

WS 1500

Designed for low frequency reinforcement and composed of three models,the **WS series** is suitable for almost any installations.

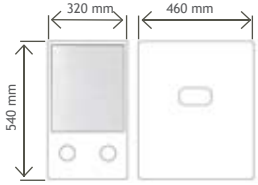
They feature a woofer with a great response in low frequency and a built in low pass filter. Their compact floor footprint enables them to be discretely positioned within the installation.

The **WS 1000** is the perfect complement to installation louds-peakers from the STUDIO series, whereas **WS 1200** and **1500** are more appropriate for loudspeakers with high acoustic response.

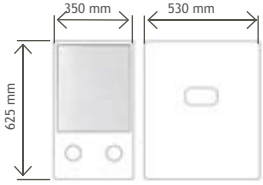
Features

- Superior low frequency response for true sub-bass.
- Suitable for almost any installations.
- Low-pass built-in filter.

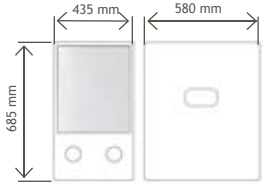
WS 1000



WS 1200



WS 1500



Technical data	WS 1000	WS 1200	WS 1500
Type:	Subwoofer.	Subwoofer.	Subwoofer.
Elements:	10” woofer.	12” woofer.	15” woofer.
Power handling:	250 W RMS.	400 W RMS.	500 W RMS.
Max. power handling:	500 W.	800 W.	1000 W.
Impedance:	8 Ω ±15% @ 90 Hz 1 V.	8 Ω ±15% @ 90 Hz 1 V.	8 Ω ±15% @ 90 Hz 1 V.
Input connectors:	2 x speaker 4 pole chassis connector.	2 x speaker 4 pole chassis connector.	2 x speaker 4 pole chassis connector.
Sensitivity:	102 dB ±3 dB @ 1m 1W.	103 dB ±3 dB @ 1m 1W.	103 dB ±3 dB @ 1m 1W.
Max SPL:	125 dB +/- 3 dB @ 1W 1m.	129 dB +/- 3 dB @ 1W 1m.	129 dB +/- 3 dB @ 1W 1m.
Frequency response:	40 Hz to 400 Hz (SPL. -10 dB).	40 Hz to 400 Hz (SPL. -10 dB).	40 Hz to 400 Hz (SPL. -10 dB).
Crossover frequency:	HPF: -12 dB/oct. LPF: 0 dB/oct.	HPF: -12 dB/oct. LPF: 0 B/oct.	HPF: -12 dB/oct. LPF: 0 dB/oct.
Dispersion (HxV):	100° x 45°.	100° x 45°.	100° x 45°.
Material (housing):	Agglomarated wood.	Agglomarated wood.	Agglomarated wood.
Material (grille):	Metal.	Metal.	Metal.
Dimensions (WxHxD):	320 x 540 x 460 mm.	350 x 625 x 530 mm.	435 x 685 x 580 mm.
Weight:	15.8 kg.	17.2 kg.	19.1 kg.

WND series

Trapezoidal loudspeakers

Thanks to their trapezoidal design and speaker's distribution, **WND** loudspeakers can be used as commercial projectors or grouped to form a cluster.

Each loudspeaker is composed of 2 woofers and 1 tweeter for a large sound dispersion. Their combination provides an excellent output frequency mix, a well-balanced sound for short distances and a great medium frequency response.

Taking into account their shape and the 2 available colours (black and white finish), the **WND** loudspeakers are perfectly appropriate for commercial audio applications, providing flexibility and sound quality.

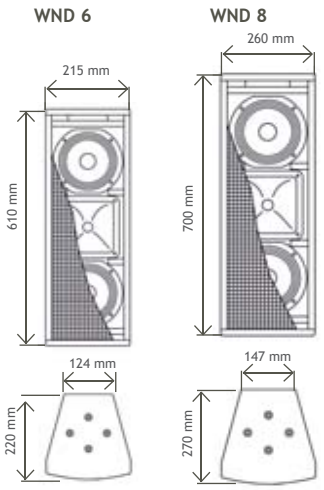
Features

- Versatile, two way trapezoidal loudspeakers.
- Excellent output frequency mix.
- Well-balanced sound for short distances.
- Available with black and white finish.

Rear view.

WND 8

WND 6



Technical data	WND 6	WND 8
Type:	Trapezoidal loudspeaker.	Trapezoidal loudspeaker.
Elements:	2 x 6.5" woofer + 1.35" TWT.	2 x 8" woofer + 1.35" TWT.
Power handling:	200 W RMS.	250 W RMS.
Max power handling:	400 W.	500 W.
Impedance:	8 Ω.	8 Ω.
Input connectors:	2 x XLN4.	2 x XLN4.
Sensitivity:	93 dB @ 1m/1W.	95 dB @ 1m/1W.
Max SPL:	119 dB.	122 dB.
Frequency response:	50 Hz - 18 kHz.	68 Hz - 18 kHz.
Dispersion (H x V):	50° - 100° x 55°.	50° - 100° x 55°.
Material (housing):	MDF wood.	MDF wood.
Material (grille):	Iron.	Iron.
Dimensions (WxHxD):	215 x 610 x 220 mm.	260 x 700 x 270 mm.
Weight:	13.3 kg.	17.4 kg.

ARQ series

Trapezoidal loudspeakers

The design of the **ARQ series** is based on installer feedback, taking into account what do they consider important in a medium power installation loudspeaker made for fixed installations.

Audio fidelity.

Choosing the right components has been one of the first steps in the design of the series. The **WORK** team has selected the components which ensure an excellent audio fidelity and enough power for medium size installation purposes. Acoustic enclosures have been internally designed to optimize sound output, taking advantage of efficient filters.

Suitable for low impedance and 100 V Line installations.

One of the main advantages of the **ARQ series** lies in its built-in transformer: ARQ loudspeakers can be directly installed in either low impedance (8 Ω) and 100 V Line installations. There is no need to buy any accessory. A switch allows to connect low impedance inputs directly to the speaker, without passing across the transformer.

Easy to install.

ARQ series provides several mounting systems: built-in inserted screws in top/bottom, sides or rear being able to use U brackets in vertical and/or horizontal positions and also a 2D bracket when it is added at the back of the cabinet.

Neutral design...with style.

The **ARQ series** has been made taking into account that loudspeakers have to respect the overall design of the installation. That is why a special care has been taken to the external design of the loudspeakers. The elegant shape and minimalist style of the cabinet make easier their integration in almost any installation.

Excellent finish.

Each detail of the ARQ loudspeakers has been designed with care. That is why cabinets are made of strong quality plywood and use the best painting materials, ensuring the long lifetime of the speaker.

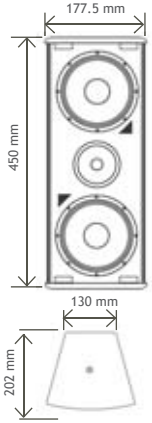
Features

- Loudspeakers designed for fixed installations.
- Elegant shape and minimalist design.
- Strict selection of components.
- Built-in transformer to use them in low impedance (8 Ω) and 100 V Line installations.
- Switch for low impedance inputs connection directly across the transformer.
- Easy to install thanks to the several positions available.
- Made of strong quality plywood.

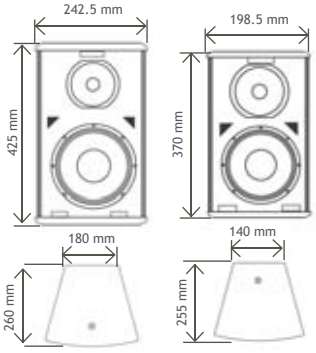
Technical data	ARQ 16	ARQ 18	ARQ 25
Type:	Two way passive loudspeaker.	Two way passive loudspeaker.	Two way passive loudspeaker.
Elements:	6 1/2" woofer + 1" compression driver.	8" woofer + 1" compression driver.	2 x 5 ¼" woofer + 1" TWT.
Power taps (100 V Line):	40 W (250 Ω) / 20 W (500 Ω).	40 W (250 Ω) / 20 W (500 Ω).	40 W (250 Ω) / 20 W (500 Ω).
(*) Power taps (70 V Line):	20 W (245 Ω) / 10 W (490 Ω).	20 W (245 Ω) / 10 W (490 Ω).	20 W (245 Ω) / 10 W (490 Ω).
Power handling (low impedance):	80 W RMS / 160 Prog at 8 Ω.	120 W RMS / 240 Prog at 8 Ω.	120 W RMS / 240 Prog at 16 Ω.
Input connectors:	Terminals (screw).	Terminals (screw).	Terminals (screw).
Sensitivity:	86 dB (1 W @ 1 m).	87 dB (1 W @ 1 m).	87 dB (1 W @ 1 m).
Max SPL:	105 dB.	108 dB.	108 dB.
Frequency response:	75 Hz - 20 kHz.	70 Hz - 20 kHz.	95 Hz - 20 kHz.
Dispersion (HxV):	90° x 60°	90° x 60°	60° x 60°
Material (housing):	Plywood.	Plywood.	Plywood.
Material (grille):	Metal.	Metal.	Metal.
Dimensions (WxHxD):	370 x 195.5 x 255 mm.	425 x 242.5 x 260 mm.	450 x 177.5 x 202 mm.
Weight:	7.1 kg.	9.2 kg.	7.2 kg.

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

ARQ 16



ARQ 25



ARQ 18

Suitable for U brackets to be used in vertical and horizontal positions.

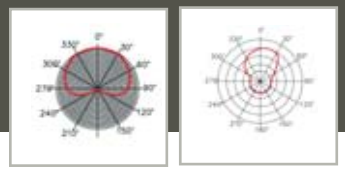
XP 10 Pro / XP 20 Pro

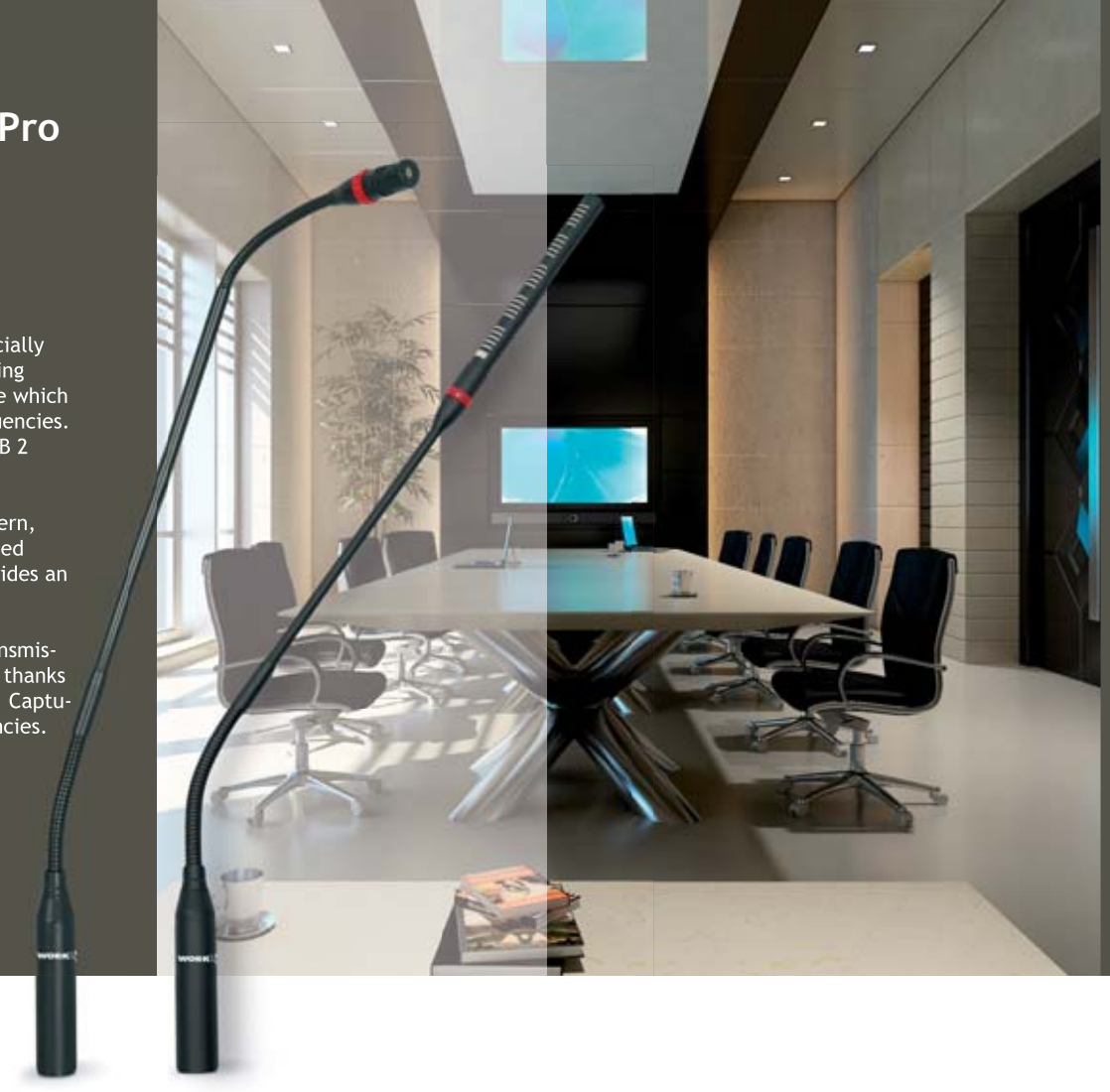
Gooseneck microphones

These gooseneck microphones, specially designed for conferences and meeting rooms, feature an interference tube which increases directivity at higher frequencies. Both models are suitable for the XPB 2 optional desktop base.

XP 10 Pro has a cardioid polar pattern, a wide low impedance and a balanced output. Its frequency response provides an excelent full range reproduction.

XP 20 Pro ensures a clear voice transmission and a very low feedback level, thanks to its linear+gradient polar pattern. Capture angle is constant on high frequencies.





XP 10 Pro XP 20 Pro

Features

- Gooseneck microphones designed for conferences and meeting rooms.
- Interference tube to increase directivity at higher frequencies.
- **XP 10 Pro** with cardioid polar pattern and balanced output (low impedance).
- **XP 20 Pro** with linear + gradient polar pattern and low feedback level.
- Suitable for the optional **XPB 2** desktop base.

Technical data	XP 10 Pro	XP 20 Pro
Element:	Electret condenser.	Electret condenser.
Polar pattern:	Unidirectional + cardioid.	Linear + gradient.
Frequency response:	50 Hz-16 kHz.	50 Hz-18 kHz.
Sensitivity:	-54 dB ±3 dB/Pa.	-45 dB ±3 dB/Pa.
Output impedance:	200 Ω ±30%.	250 Ω ±30% .
Max SPL:	138 dB.	125 dB.
S/N ratio:	65 dB.	72 dB.
Dynamic range:	110 dB.	105 dB.
Main supply:	Phantom DC 9-52 V.	Phantom DC 16-52 V.
Output connector:	Male XLR3 pin.	Male XLR3 pin.
Dimensions:	30 (max Ø) x 490 mm.	30 (max Ø) x 490 mm.
Weight:	178 g.	178 g.
Accessories:	Windscreen.	Windscreen.

XPB 2

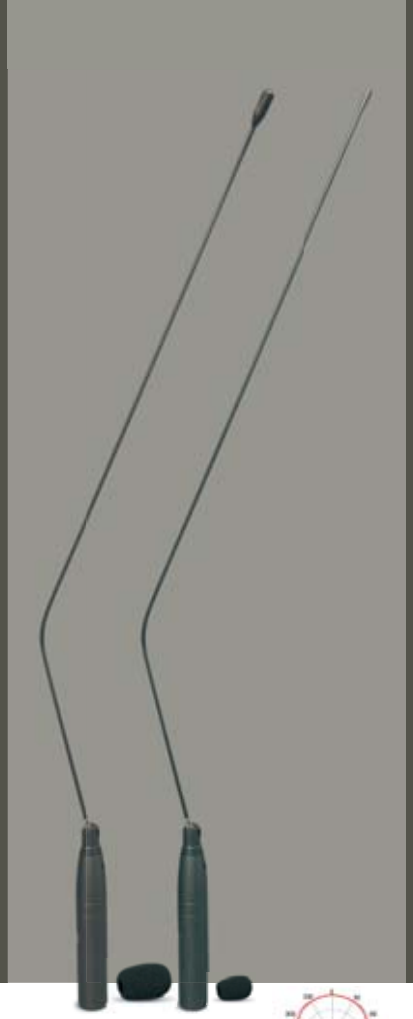
Desktop base for microphones

This desktop base designed for the **XP Pro series** isolates microphones from vibrations and mechanical noises. It features an On/Off switch, a Combi connector for several types of microphones and a male XLR3 connector for output and connection to mixer.

Features

- Desktop base for microphones.
- Isolates microphones from vibrations and mechanical noises.
- On/Off switch with Combi connector.
- XLR3 male connector for output and connection to mixer.

Technical data	XPB 2
Type:	Desktop base for microphones.
Input connection:	XLR3 combi - ¼" Jack.
Output connection:	Male XLR3 pin.
On/Off switch:	Yes.
Dimensions (WxHxD):	160 x 110 x 40 mm.
Weight:	1.3 kg.



USM 4 USM 5

USM 4 / USM 5

Desktop microphone

UBM 2

Desktop base for USM microphones

WORK® presents the USM ultra-thin desktop microphones, specially designed for conferences. Thanks to their reduced size, they go unperceived in the installation.

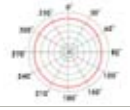
These desktop microphones feature an interference tube that increases directivity at higher frequencies to emit a clear and pure sound. They all have Phantom supply and turn 180° for user convenience.

USM 4

USM 5

Features

- Ultra-thin desktop microphones.
- Designed for conferences and meetings.
- Interference tube to increase directivity at higher frequencies.
- 180° rotation for user convenience.
- Phantom supply.



Technical data	USM 4	USM 5
Element:	Electret with interference tube.	Electret with interference tube.
Polar pattern:	Cardioid.	Omni-directional.
Frequency response:	56 Hz - 16 kHz.	50 Hz - 18 kHz.
Sensitivity:	-40 dB ±3 dB (0 dB=1V/Pa at 1kHz).	-40 dB ±3 dB (0 dB=1V/Pa at 1kHz).
Impedance:	250 Ω ±30% (at 1 kHz).	250 Ω ±30% (at 1 kHz).
Load impedance:	1.250 Ω.	1.250 Ω.
Noise level:	21 dBA.	21 dBA.
Max SPL:	135 dB (THD 0,5% 1 kHz).	135 dB (THD 0,5% 1 kHz).
S/N ratio:	72 dB.	72 dB.
Dynamic range:	113 dB.	113 dB.
Main supply:	Phantom DC 16-52 V.	Phantom DC 16-52 V.
Consumption:	10 mA.	10 mA.
Output connector:	XLR3.	XLR3.
Dimensions:	Ø 30 x 500 mm.	Ø 30 x 500 mm.
Weight:	120 g.	120 g.
Accessories:	Windscreen.	Windscreen.

UBM 2 is an optional desktop base designed for the **USM 4** and **USM 5** models. This convenient solution isolates microphones from vibrations and mechanical noises.

Features

- Desktop base for the USM 4 and USM 5 microphones.
- Isolates microphones from vibrations and mechanical noises.
- Easy installation and versatile use.

Technical data	UBM 2
Type:	Desktop base for microphones.
Input connection:	XLR3.
Output connection:	Male XLR3 pin.
Dimensions (WxHxD):	130 x 105 x 40 mm.
Weight:	500 g.

USM 10

Desktop microphone

USM 10

Contrary to **USM 4** and **USM 5**, **USM 10** already has a built-in desktop base and a 10 dB reducer to adapt output to any conditions.

USM 10

Technical data	USM 10
Element:	Electret condenser.
Polar pattern:	Cardioid.
Frequency response:	50 Hz - 16 kHz.
Sensitivity:	-45 dB ±3 dB (at 1 kHz - 5,6 mV/Pa).
Impedance:	250 Ω ±30% (at 1 kHz).
Load impedance:	1.250 Ω.
Noise level:	21 dBA.
Max SPL:	135 dB (THD 0,5% 1 kHz).
S/N ratio:	73 dB.
Dynamic range:	113 dB.
Main supply:	Phantom DC 19-52 V + 2x 1.5V (base).
Consumption:	3.5 mA.
Output connector:	Mini XLR3.
Dimensions:	490 x 140 x 100 mm.
Weight:	440 g.
Accessories:	Base, windscreen and mini XLR3-XLR3 cable.

XS 1000 Pro

Headset microphone

Electret headset microphone with omnidirectional /cardioid polar pattern.

It includes a 1.5 mm Mini-jack XLR adaptor.

XS AD 1.
Mini jack 2.5 mm /
Mini XLR 3 pin.

Technical data	XS 1000 Pro
Polar pattern:	Omnidirectional.
Output connector:	¼" Jack.
Frequency response:	20 Hz - 20 kHz.
Impedance:	1 kΩ.
Sensitivity:	-45 dB.
Main supply:	DC 9-52 V.
Microphone diameter:	Ø 5 mm.
Cable:	Ø 2 mm/1 m length.
Weight:	36 gr.
Accessories:	Windscreen, mini-XLR adapter.

XS 1010 Pro

Headset microphone

Electret headset microphone with unidirectional /cardioid polar pattern.

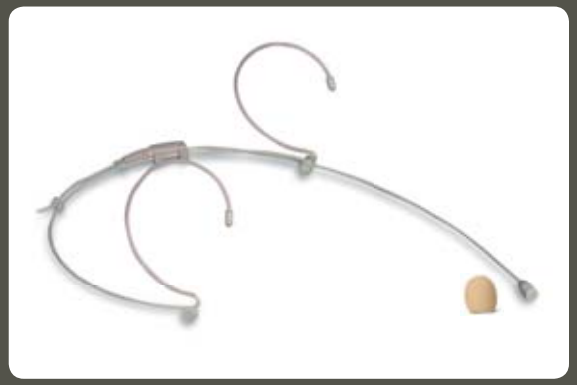
It includes a 1.5 mm Mini-jack XLR adaptor.

XS AD 1.
Mini jack 2.5 mm /
Mini XLR 3 pin.

Technical data	XS 1010 Pro
Polar pattern:	Unidirectional.
Output connector:	2.5 mm mini-jack.
Frequency response:	50 Hz - 20 kHz.
Impedance:	1 kΩ.
Sensitivity:	-45 dB.
Main supply:	DC 9-52 V.
Microphone diameter:	Ø 12 mm.
Cable:	Ø 2 mm/1.2 m length.
Weight:	42 gr.
Accessories:	Windscreen, mini-XLR adapter.

XS 1500 Pro

Headset microphone



XS 1500 Pro has an ergonomic design and a robust fixation system. It is adequate for live shows because it goes unperceived and provides total liberty of movement on stage.

This microphone is very convenient to use, thanks to its fixation system and to the arm which can be oriented in any direction. It is confortable even for those wearing glasses. It includes a 1.5 mm Mini-jack XLR adaptor.

XS AD 1.
Mini jack 2.5 mm /
Mini XLR 3 pin.

Technical data	XS 1500 Pro
Polar pattern:	Omnidirectional
Output connector:	2.5 mm mini-jack.
Frequency response:	20 Hz - 20 kHz.
Impedance:	1 kΩ.
Sensitivity:	-42 dB.
Main supply:	DC 1.5 - 10 V.
Microphone diameter:	Ø 5 mm.
Cable:	Ø 1.4 mm / 1.20 m lenghth.
Weight:	15 gr.
Accessories:	Windscreen, mini-XLR adapter.

XS 1550 Pro
Headset microphone

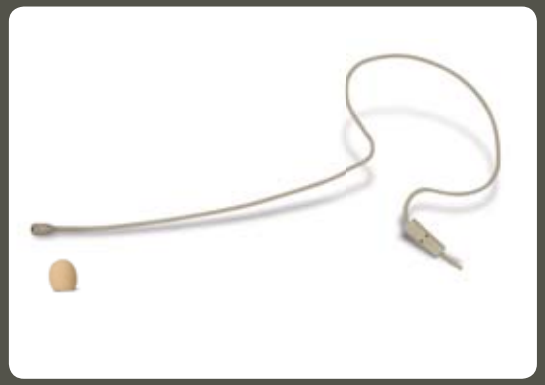
XS 1550 Pro is an improved version of the XS 1500 Pro. It has an ergonomic design and a robust fixation system, being adequate for live shows. It differentiates itself from the XS 1500 Pro as it is totally foldable and can be disassembled to protect it during transport.

It includes a transport bag and a mini-XLR adapter for different kind of connection.

XS AD 1.
Mini jack 2.5 mm /
Mini XLR 3 pin.

Technical data	XS 1550 Pro
Polar pattern:	Electret omnidirectional.
Output connector:	2.5 mm mini-jack.
Frequency response:	20 Hz - 20 kHz.
Impedance:	2 kΩ.
Sensitivity:	-45 dB.
Main supply:	DC 1,5-12 V.
Microphone diameter:	Ø 3.5 mm.
Cable:	Ø 1.4 mm / 1.2 m length.
Weight:	15 gr.
Accessories:	Windscreen, mini-XLR adapter.

XS 1400 Pro
Headset microphone



XS 1400 Pro is a convenient headset microphone with a unique point of fixation. It has an omnidirectional response, low noise level and high EMI suppression, which ensures quality frequency response. Its built-in circuit provides accurate electro-acoustic response.

Technical data	XS 1400 Pro
Polar pattern:	Electret omnidirectional.
Output connector:	Mini-XLR3.
Frequency response:	20 Hz - 20 kHz.
Impedance:	1 kΩ (±30%).
Sensitivity:	-45 dB.
Main supply:	DC 1.5-10 V.
Microphone diameter:	3 mm.
Cable:	Ø 1.5 mm x 1.2 m.
Weight:	15 g.
Accessories:	Windscreen.

XS 2000 Pro
Lavalier microphone

A 2.5 mm mini jack
/ XLR adapter.

This ultra-thin electret lavalier microphone is very convenient for live shows as it goes totally unperceived. It features a mini-XLR adapter for different kind of connection.

Technical data	XS 2000 Pro
Polar pattern:	Electret omnidirectional.
Output connector:	2.5 mm mini-jack.
Frequency response:	30 Hz - 16 kHz.
Impedance:	600 Ω.
Sensitivity:	-45 dB.
Main supply:	DC 48 V.
Microphone diameter:	Ø 8 mm.
Cable:	Ø 2 mm / 1.10 m length.
Weight:	20 gr.
Accessories:	Windscreen, mini-XLR adapter.

SH 2500
Folding desktop base

- Folding desktop base for microphone.
- 3 legs.

SH 2501
Desktop base

- Desktop base for microphone.
- Round base.
- Diameter: 150 mm.
- Height: 120 mm.

SH 2502
Desktop base

- Desktop base for microphone. Round base. With gooseneck.
- Diameter: 130 mm.
- Height: 320 mm.

SH 2503
Extendable desktop base

- Extendable desktop base for microphone.
- Round base.
- Diameter: 150 mm.
- Minimum height: 220 mm.
- Maximum height: 420 mm.

SH 2504
Extendable desktop base

- Extendable desktop base for microphone.
- Round base.
- With gooseneck.
- Made of iron.
- Diameter: 150 mm.
- Minimum height: 420 mm.
- Maximum height: 560 mm.

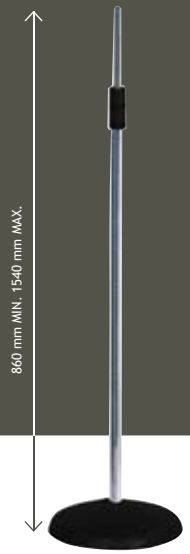
SH 2505
Extendable desktop base

- Extendable floor stand for microphone.
- Round base.
- With telescopic boom arm.
- Silver metal.
- Diameter: 150 mm.
- Maximum height: 610 mm.
- Boom arm length: 400 mm.

SH 2506
Microphone stand

- Extendable floor stand for microphone.
- 3 folding legs.
- With telescopic boom arm.
- Silver metal.
- Maximum width: 500 mm.
- Maximum height: 770 mm.
- Boom arm length: 870 mm.

SH 2601
Microphone stand



- Extendable microphone stand.
- Round base
- Silver metal.
- Minimum height: 860 mm.
- Maximum height: 1540 mm.

SH 2630
Microphone stand

- Folding microphone stand.
- 3 folding legs.
- With extendable boom arm.
- Black colour.
- Maximum width: 580 mm.
- Maximum height: 1600 mm.
- Boom arm length: 790 mm.

SH 2654
Microphone stand

- Folding microphone stand.
- 3 legs.
- With extendable boom arm.
- Made of aluminium and iron.
- Black colour.
- Base with metal hinge.
- Maximum width: 630 mm.
- Maximum height: 1710 mm.
- Boom arm length: 860 mm.

IC PRO series

Ceiling speakers

The **IC Pro** series of **WORK**® is composed of three ceiling speakers with separate woofer and tweeter. They provide high sound quality in your installation.

They are made of high impact resistance ABS plastic and feature a metal grille as well as a metal back enclosure which contains the crossover network and transformer. A bass reflex design, coupled with extended enclosure volume and bass resonance tube provide better bass extension.

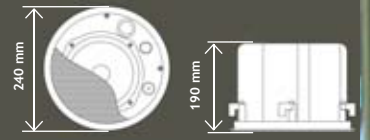
They are suitable for high impedance (70 V, 100 V) voltage line and low impedance (8 Ω) installations. The power tap selector is accessible from the front of the speaker so levels can be adjusted after installation. They also have a detachable Euroblock connector, contained within a metal compartment for ease of installation.

Features

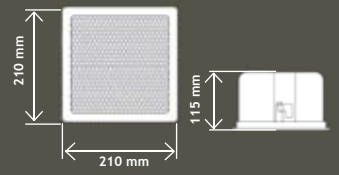
- Two way ceiling speakers designed for retail stores and halls.
- Separate woofer and tweeter with low frequency tube resonator for excellent sound quality.
- Suitable for high impedance (70 V, 100 V) voltage line and low impedance (8 Ω) installations.
- High resistance ABS housing with metal grille and metal rear cover.
- Power tap selector accessible from the front of the speaker.

IC 4 PRO

IC 6 PRO



IC 4 PRO R



IC 4 PRO R

IC 6 PRO

IC 4 PRO

Rear view

Technical data	IC 4 PRO	IC 4 PRO R	IC 6 PRO
Type:	Two way ceiling speaker.	Two way ceiling speaker.	Two way ceiling speaker.
Elements:	4" woofer + ¾" TWT.	4" woofer + ¾" TWT.	6.5" woofer + ¾" TWT.
Power taps (100 V line):	8 W (1k2 Ω) / 4 W (2k5 Ω) / 2 W (5 kΩ) / 1 W (10 kΩ).	8 W (1k2 Ω) / 4 W (2k5 Ω) / 2 W (5 kΩ) / 1 W (10 kΩ).	50 W (200 Ω) / 30 W (333 Ω) / 15 W (666 Ω) / 5 W (2 kΩ).
Power taps (70 V line):	8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k5 Ω) / 1 W (4k9 Ω).	8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k5 Ω) / 1 W (4k9 Ω).	50 W (98 Ω) / 30 W (163 Ω) / 15 W (326 Ω) / 5 W (980 Ω).
Low impedance output:	8 Ω at 30 W.	8 Ω at 30 W.	8 Ω at 60 W.
Frequency response:	80 Hz - 20 kHz.	80 Hz - 20 kHz.	60 Hz - 20 kHz.
Sensitivity (1W/1m):	88 dB.	88 dB.	88 dB.
Max SPL:	95 dB.	96 dB.	104 dB.
RAL colour code:	RAL 9003.	RAL 9003.	RAL 9003.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (Ø x D):	160 x 30 mm (max ceiling thickness).	190 x 190 mm 30 mm. (max ceiling thickness).	210 mm x 30 mm. (max ceiling thickness).
Dimensions (Ø x D):	185 x 130 mm.	210 x 210 x 115 mm (WxHxD).	240 x 190 mm.
Weight:	2.3 kg.	2.4 kg.	2.8 kg.

IC 6 PRO A

Self-powered ceiling speaker

IC 6 PRO A is a ceiling speaker like no other. This ingenious speaker stands out for its internal 25 W amplifier and because it is controlled by DMX. Thanks to this innovative idea, installation results very easy, because IC 6 Pro A can cover many zones (512 zones per universe). Speakers can be controlled independently of each others, by using them with a DMX console.

Obviously, it is no necessary to use digital control, so IC 6 Pro A can also be used as a simple self-powered ceiling speaker.

Digital control.

DMX is a protocol that has been initially designed for lighting consoles, but it is also well known by integrators and it is compatible with the most common control devices.

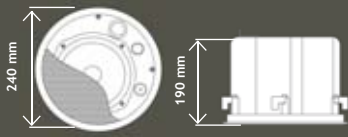
The IC 6 Pro A uses one DMX channel for volume control and to switch On/Off the amplifier (Standby mode to save energy). It provides DIP switch on rear panel to select Start DMX address.

Self-powered speaker.

The built-in Class D power amplifier drives up to 25 W at 8 Ω. The balanced input makes it suitable for long distance cables.

Features

- Self-powered, two way loudspeaker for fixed installations.
- 25 W class D amplifier.
- Controlled through RS 485/DMX or Analog signal DC 0-10 V (for volume control).
- Power On/Off (Standby mode) by DMX.
- Balanced input signal.
- DIP-switch for DMX address selection.
- Suitable for low impedance (8 Ω) installations.
- White LED on front panel to indicate if the unit is turned on.



Technical data	IC 6 PRO A
Type:	Self-powered two way ceiling speaker.
Elements:	6.5" woofer + ¾" TWT.
Amplifier power:	25 W at 8 Ω.
Frequency response:	60 Hz - 20 kHz.
Input impedance:	10 kΩ.
Sensitivity (1W/1m):	88 dB.
Max SPL:	102 dB.
RAL colour code:	RAL 9003.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Mounting dimensions (Ø x D):	220 mm x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	241 x 171 mm.
Weight:	2.8 kg.

IC S series

Ceiling speakers

These ceiling speakers combine an excellent coaxial woofer and a swivel tweeter, in order to get the desired sound directivity.

This series is suitable for high impedance (100 V) voltage line installations, including a transformer with 4 selectable inputs.

Each model has its own size and power handling, in order to provide an adequate solution to several installation requirements. Additionaly, the fastening system ensures a fast and safe mounting operation.

Features

- Ceiling speakers with coaxial woofer and swivel tweeter.
- Suitable for high impedance (100 V) voltage line installations.
- Transformer with 4 selectable inputs.
- High resistance ABS housing with metal grille.
- Easy, fast and safe fastening system.

IC 8 S

IC 6 S

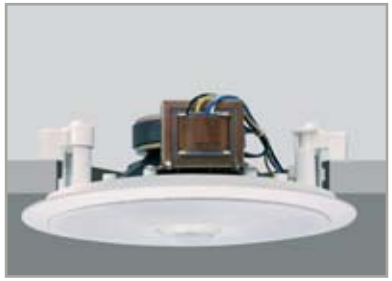
IC 5 S

IC 8 S

IC 6 S

IC 5 S

Side view



Technical data	IC 5 S	IC 6 S	IC 8 S
Type:	Two way ceiling speakers.	Two way ceiling speakers.	Two way ceiling speakers.
Elements:	5" ¼ woofer + 1" TWT.	6"½ woofer + 1" TWT.	8" woofer + 1" TWT.
Power taps (100 V line):	10 W (1 kΩ) / 5 W (2 kΩ) / 2.5 W (4 kΩ) / 1.25 W (8 kΩ).	10 W (1 kΩ) / 5 W (2 kΩ) / 2.5 W (4 kΩ) / 1.25 W (8 kΩ).	30 W (333 Ω) / 15 W (666 Ω) / 8 W (1k25 Ω) /5 W (2 kΩ).
(*) Power taps (70 V line):	5 W (980 Ω) / 2.5 W (1k96 Ω) / 1.25 W (4k1 Ω) / 0.6 W (7k5 kΩ).	5 W (980 Ω) / 2.5 W (1k96 Ω) / 1.25 W (4k1 Ω) / 0.6 W (7k5 kΩ).	15 W (326 Ω) / 7.5 W (653 Ω) / 4 W (1k22 Ω) / 2.5 W (1k96 Ω).
Frequency response:	28 Hz - 20 kHz.	43 Hz - 20 kHz.	50 Hz - 20 kHz.
Sensitivity (1W/1m):	88 dB.	90 dB.	92 dB.
Max SPL:	98 dB.	100 dB.	102 dB.
RAL colour code:	RAL 9003.	RAL 9003.	RAL 9003.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (Ø x D):	172 x 30 mm (max ceiling thickness).	200 x 30 mm (max ceiling thickness).	230 x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	197 x 80 mm.	228 x 82.5 mm.	260 x 101.6 mm.
Weight:	0.85 kg.	1 kg.	1.4 kg.

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

IC T series

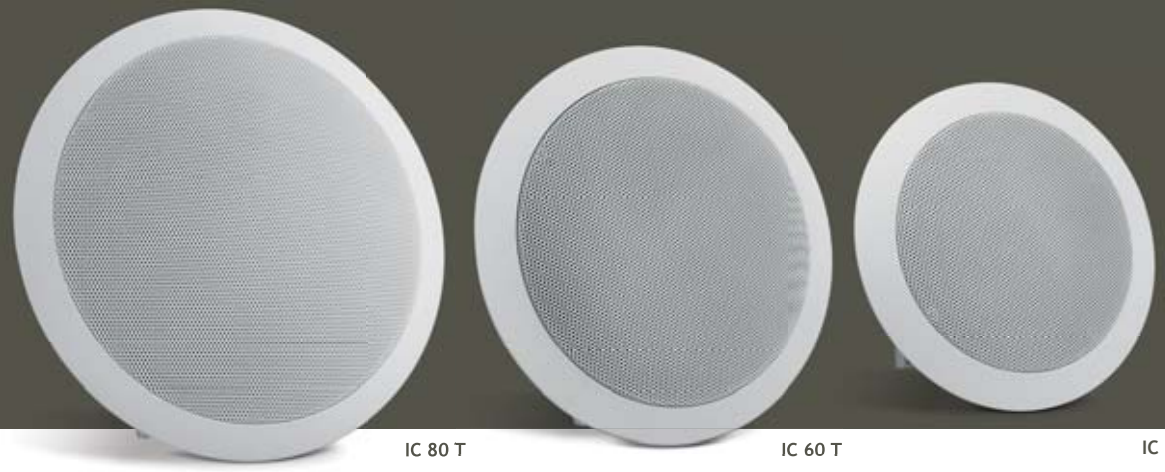
Ceiling speakers

These three professional ceiling speakers are designed to offer a professional solution to contractors on a budget. They are all suited for small audio installations like retail stores and small rooms.

They feature a low weight, a quick installation system and clean design for a perfect integration. In order to ensure a long lifetime, they are made of strong ABS plastic which protects them from heat.

Features

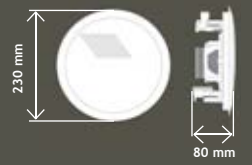
- Ceiling speakers with full range woofer.
- Suitable for high impedance (100 V) voltage line installations.
- High resistance ABS housing with metal grille.
- Easy, fast and safe fastening system.



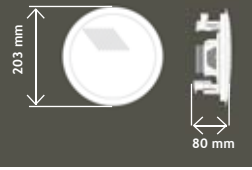
IC 80 T IC 60 T IC 50 T

IC 80 T

IC 60 T



IC 50 T



Rear view

Side view

Technical data	IC 50 T	IC 60 T	IC 80 T
Type:	Full range ceiling speakers.	Full range ceiling speakers.	Full range ceiling speakers.
Elements:	5” woofer.	6” woofer.	8” woofer.
Power taps (100 V line):	6 W (1k6 Ω) / 3 W (3k3 Ω).	6 W (1k6 Ω) / 3 W (3k3 Ω).	6 W (1k6 Ω) / 3 W (3k3 Ω).
(*) Power taps (70 V line):	3 W (1k6 Ω) / 1.5 W (3k2 Ω).	3 W (1k6 Ω) / 1.5 W (3k2 Ω).	3 W (1k6 Ω) / 1.5 W (3k2 Ω).
Frequency response:	110 Hz - 18 kHz.	110 Hz - 18 kHz.	50 Hz - 18 kHz.
Sensitivity (1W/1m):	88 dB.	88 dB.	88 dB.
Max SPL:	95 dB.	95 dB.	95 dB.
RAL colour code:	RAL 9016.	RAL 9016.	RAL 9016.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (Ø x D):	170 x 30 mm (max ceiling thickness).	200 x 30 mm (max ceiling thickness).	240 x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	Ø 203 x 80 mm.	Ø 230 x 80 mm.	Ø 270 x 85 mm.
Weight:	0.70 kg.	0.90 kg.	1.2 kg.

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

IC T series

Ceiling speakers

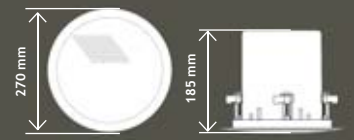
Designed for commercial audio applications, these three ceiling speakers take advantage of a high quality coaxial transducer to provide quality sound results.

Their power tap selector makes them suitable for high impedance (70 V, 100 V) voltage line and low impedance (8 Ω) installations. The transformer is contained within a metal can enclosure for improved response.

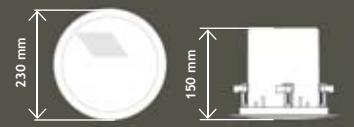
Features

- Two way ceiling speakers for commercial audio applications.
- Suitable for high impedance (70/100 V) voltage line and low impedance (8 Ω) installations.
- High resistance ABS housing with metal grille.
- Full protection of the transformer.
- Easy, fast and safe fastening system.

IC 811 T



IC 611 T



IC 511 T

IC 811 T IC 611 T IC 511 T

Technical data	IC 511 T	IC 611 T	IC 811 T
Type:	Two way ceiling speakers.	Two way ceiling speakers.	Two way ceiling speakers.
Elements:	5” woofer + 0.5” TWT.	6” woofer + 0.5” TWT.	8” woofer + 0.5” TWT.
Power taps (100 V line):	20 W (500 Ω) / 10 W (1 kΩ) / 5 W (2 kΩ) / 2.5 W (4 kΩ).	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω) / 3.8 W (2k6 Ω).	40 W (250 Ω) / 20 W (500 Ω) /10 W (1 kΩ) / 5 W (2 kΩ).
Power taps (70 V line):	20 W (245 Ω) / 10 W (490 Ω) / 5 W (980 Ω) / 2.5 W (1k96 Ω) / 1.25 W (3k92 Ω).	30 W (163 Ω) / 15 W (326 Ω) / 7.5 W (653 Ω) / 3.8 W (1k3 Ω) / 1.9 W (2k6 Ω).	40 W (122 Ω) / 20 W (245 Ω) /10 W (490 Ω) / 5 W (980 Ω) / 2.5 W (1k96 Ω).
Power taps (low impedance):	20 W at 8 Ω.	30 W at 8 Ω.	40 W at 8 Ω.
Frequency response:	100 Hz - 20 kHz.	90 Hz - 20 kHz.	50 Hz - 20 kHz.
Sensitivity (1W/1m):	88 dB.	88 dB.	88 dB.
Max SPL:	101 dB.	102 dB.	104 dB.
RAL colour code:	RAL 9016.	RAL 9016.	RAL 9016.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (Ø x D):	170 x 30 mm (max ceiling thickness).	200 x 30 mm (max ceiling thickness).	240 x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	Ø 203 x 145 mm.	Ø 230 x 150 mm.	Ø 270 x 185 mm.
Weight:	1.80 kg.	2.3 kg.	3.1 kg.

Rear view

IC T series

Ceiling speakers

8 seconds that make the difference.

8 seconds, this is the time a contractor need to install these ceiling speakers. Forget about screws and any other slow mounting system: you only have to press the buttons to trigger clamps and directly fix speakers to ceiling. This fast-mounting system is 10 times faster than any other system, so contractors will save many time and increase their efficiency. This unique and patented system is also very easy to use,. Anyone can install speakers, no need to be an expert.

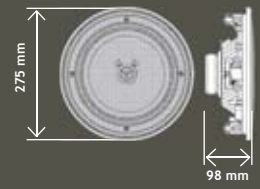
One of the main tendency in installation design is to hide the plastic parts of ceiling speakers. The IC T series features an ultra thin frame design with a uniform grille which occupies 96% of the total speaker surface.

In order to provide a high quality sound, the IC T ceiling speakers include an efficient two way system, perfectly adequate for background music.

Features

- Two way ceiling speakers.
- Suitable for high impedance voltage line installations.
- Ultrafast fastening system (only 8 sec.), easy to install.
- The grille occupies 96% of the total speaker surface.
- Perfectly adequate for background music.

IC 880 T



IC 660 T

IC 550 T

Rear view

Side view

The uniform grille occupies 96% of the total speaker surface.

Technical data	IC 550 T	IC 660 T	IC 880 T
Type:	Two way ceiling speakers.	Two way ceiling speakers.	Two way ceiling speakers.
Elements:	5 ¼" woofer + 0.5" TWT.	6 1/2" woofer + 0.5" TWT.	8" woofer + 0.5" TWT.
Power taps (100 V line):	6 W (1k6 Ω) / 3 W (3k3 Ω) / 1.5 W (6k6 Ω).	6 W (1k6 Ω) / 3 W (3k3 Ω) / 1.5 W (6k6 Ω).	6 W (1k6 Ω) / 3 W (3k3 Ω) / 1.5 W (6k6 Ω).
(*) Power taps (70 V line):	3 W (1k6 Ω) / 1.5 W (3k2 Ω) / 0.75 W (6k5 Ω).	3 W (1k6 Ω) / 1.5 W (3k2 Ω) / 0.75 W (6k5 Ω).	3 W (1k6 Ω) / 1.5 W (3k2 Ω) / 0.75 W (6k5 Ω).
Frequency response:	81 Hz - 20 kHz.	80 Hz - 20 kHz.	62 Hz - 20 kHz.
Sensitivity (1W/1m):	87 dB.	87 dB.	87 dB.
Max SPL:	95 dB.	95 dB.	95 dB.
RAL colour code:	RAL 9003.	RAL 9003.	RAL 9003.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (Ø x D):	175 x 30 mm (max ceiling thickness).	213 x 30 mm (max ceiling thickness).	245 x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	Ø 205 x 80 mm.	Ø 237 x 75 mm.	Ø 275 x 98 mm.
Weight:	1 kg.	1.12 kg.	1.54 kg.

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

RCS 403 Pro T

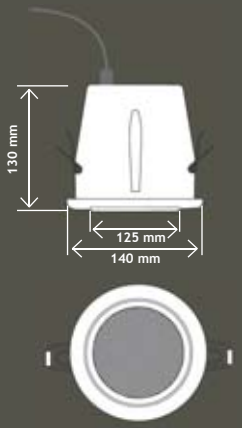
Ceiling speaker

RCS 403 PRO T is a ceiling speaker easy to install and designed for music diffusion and speech. It is suitable for high impedance (100 V) voltage line installations.

Housing is made of ABS plastic with a metal grill. Fixation with removable towing hook system ensures the perfect fastening of the ceiling speaker.

Features

- Ceiling speaker designed for music diffusion and speech.
- Suitable with for high impedance (100 V) voltage line installations.
- High resistance ABS housing with metal grille.
- Easy, fast and safe fastening system.



Technical data	RCS 403 Pro T
Type:	Full range ceiling speaker.
Elements:	4” woofer.
Power taps (100 V line):	6 W (1k6 Ω) / 3 W (3k3 Ω).
(*) Power taps (70 V line):	3 W (1k6 Ω) / 1.5 W (3k2 Ω).
Frequency response:	150 Hz - 18 kHz.
Sensitivity (1W/1m):	91 dB.
Max. SPL.:	95 dB.
RAL colour code:	9016.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Mounting dimensions (Ø x D):	Ø 125 x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	Ø 140 x 130 mm.
Weight:	0.9 kg.

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

RCS 204

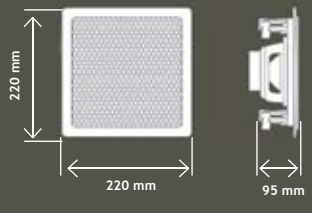
Ceiling speaker

Contrary to other ceiling speakers, **RCS 204** has a square shape, offering an alternative to contractors and designers.

This full range ceiling speaker features an ABS plastic made housing and metal grille. It is suitable for high impedance (100 V) voltage line installations. Thanks to its size (220 x 220 mm), it can be installed in any place with conventional lighting.

Features

- Full range ceiling speaker with a square shape.
- Suitable for high impedance (100 V) voltage line installations.
- High resistance ABS housing with metal grille.
- Easy, fast and safe fastening system.



Technical data	RCS 204
Type:	Full range ceiling speaker.
Elements:	4” woofer.
Power taps (100 V line):	6 W (1k6 Ω) / 3 W (3k3 Ω).
(*) Power taps (70 V line):	3 W (1k6 Ω) / 1.5 W (3k2 Ω).
Frequency response:	150 Hz - 18 kHz.
Sensitivity (1W/1m):	91 dB.
Max. SPL.:	95 dB.
RAL colour code:	9016.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Mounting dimensions (WxHxD):	185 x 185 x 30 mm (max ceiling thickness).
Dimensions (WxHxD):	220 x 220 x 95 mm.
Weight:	1.86 kg.

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

RCS series

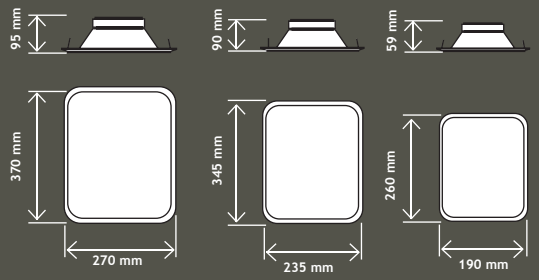
Ceiling speakers

RCS series includes three in-wall speakers designed for both background music systems and other commercial audio applications. They are molded in a high resistance ABS plastic and have a rectangular shape.

They feature an efficient 2 way or 3 way system with passive crossover filter. They are suitable for constant voltage line (100 V) installations and provide optimum results even at low frequencies, due to their wide frequency range.

Features

- In-wall speakers designed for any commercial audio applications.
- Rectangular shape.
- Two way system with passive crossover for RCS 001 and RCS 002.
- Three way system with passive crossover for RCS 003.
- Suitable with for high impedance (100 V) voltage line installations.
- High resistance ABS housing with metal grille.



RCS 003 RCS 002 RCS 001

Rear view

Technical data	RCS 001	RCS 002	RCS 003
Type:	Two way in-wall speaker.	Two way in-wall speaker.	Three way in-wall speaker.
Elements:	5" woofer + 1" tweeter.	6 1/2" full range woofer + 1" tweeter.	8" full range woofer + 2.5" tweeter + 1" silk dome.
Power taps (100 V line):	12 W (833 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω).	20 W (500 Ω) / 15 W (666 Ω) / 10 W (1 kΩ).	30 W (333 Ω) / 20 W (500 Ω) / 10 W (1 kΩ).
(*) Power taps (70 V line):	6 W (817 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω).	10 W (490 Ω) / 7.5 W (653 Ω) / 5 W (980 Ω).	15 W (326 Ω) / 10 W (490 Ω) / 5 W (980 Ω).
Frequency response:	50 Hz - 20 kHz.	45 Hz - 20 kHz.	30 Hz - 20 kHz.
Sensitivity (1W/1m):	88 dB.	90 dB.	92 dB.
RAL colour code:	RAL 9003.	RAL 9003.	RAL 9003.
Max. SPL:	98 dB.	103 dB.	106 dB.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (WxH):	211 x 144 mm.	303 x 195 mm.	330 x 230 x 30 mm.
Dimensions (WxHxD):	260 x 190 x 59 mm.	345 x 235 x 90 mm.	370 x 270 x 95 mm.
Weight:	1.3 kg.	1.52 kg.	2.50 kg.

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

ATP series

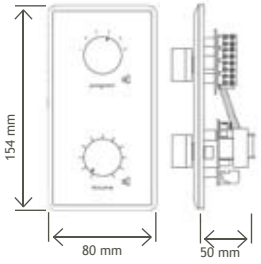
Volume controllers with program selector

The **ATP series** includes 3 volume controllers with built-in program selector. It is adequate for multizone and local control applications. The three models have a new and minimalist design in order to make their integration easier in any installation. They all include a 24 V DC input for emergency backup.

Features

- Volume controllers with built-in program selector.
- Designed for multizone and local control applications.
- Up to 50 W power (depending on model).
- Up to 10 attenuation steps.
- 24 V input for emergency alarms.

ATP 250 (50W)
ATP 224 (24W)
ATP 206 (6W) RESISTIVE



Technical data	ATP series
Material:	ABS plastic.
Colour:	White.
Dimensions (WxHxD):	80 x 154 x 50 mm.
Weight:	370 g.

AT series

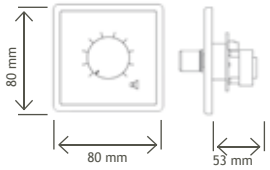
Volume controllers with amplifier

These 3 volume controllers are made of strong ABS plastic and feature an amplifier. Power, which depends on model, can reach up to 50 W. They are suitable for constant voltage line (100 V) installations and feature 10 attenuation steps (3 dB per step / max attenuation: 30 dB). It minimalist design makes its integration easier in any installation.

Features

- Volume controllers with amplifier.
- Up to 50 W (depending on model).
- Up to 10 attenuation steps.
- Suitable for 100 V Line installations.
- Recommended for multizone and local control.

AT 150 (50W)
AT 125 (25W)
AT 106 (6W) RESISTIVE



Technical data	AT series
Available outputs:	100 V.
Attenuation steps:	10 steps (3dB por step).
Max attenuation:	30 dB.
Material:	ABS plastic.
Colour:	White.
Dimensions (WxHxD):	80 x 80 x 53 mm.
Weight:	250 g.

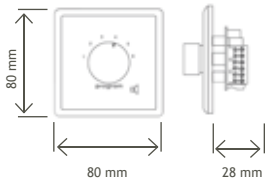
AP 6

Programmer + volume attenuator

AP 6 is a six position programmer made of ABS plastic. It design allows its integration in a standard electrical box: this makes contractors job easier because they use the same boxes for interruptors and network sockets.

Features

- Attenuator for volume remote control.
- Suitable for low impedance (4Ω) stereo configurations.
- Controls up to 25 W per channel, with 10 steps of 3 dB.
- Possibility to conect speakers at the same amplifier output.



Technical data	AP 6
Programas:	6.
Material:	ABS plastic.
Colour:	White.
Dimensions (WxHxD):	80 x 80 x 28 mm.
Weight:	160 g.

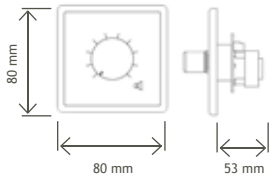
AT 225

Stereo volume attenuator

AT 225 is an adequate solution for volume remote control in a stereo configuration with low impedance (4 Ω).
This attenuator features two transformers and controls in 10 steps of 3 dB up tu 25 W per channel. Several low impedance loudspeakers can be connected at the same amplifier output.

Features

- Stereo attenuator for volume remote control.
- Suitable for low impedance (4 Ω) stereo configurations.
- Controls up to 25 W per channel, with 10 steps of 3 dB.
- Possibility to conect speakers at the same amplifier output.



ATP series

AT series | AP 6

Technical data	AT 225
Available outputs:	4 Ω.
Power:	2 x 25 W.
Attenuation steps:	10 steps (3dB por step).
Max attenuation:	30 dB.
Material:	ABS plastic.
Colour:	White.
Dimensions (WxHxD):	80 x 80 x 53 mm.
Weight:	340 g.

MSH 30/BT / WHS 45 S

Sound projectors

WHS 45 S and **MSH 30/BT** are sound projectors that feature a full range speaker and a SPL range up to 115 dB. They provide efficient directionality. **MSH 30/BT** features a two way system to optimize acoustic response.

Thanks to their high IP range, they are ideal for outdoor installations and other areas suffering adverse weather conditions. Their aluminium handle enables a fast mounting operation.

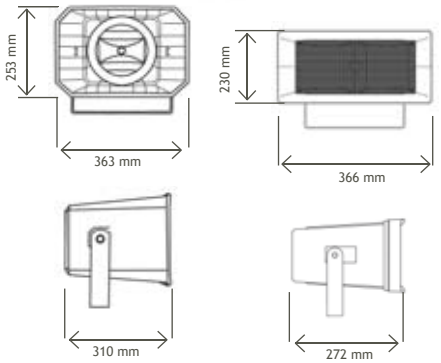
Features

- High quality sound projectors.
- Designed to provide an efficient directionality.
- Suitable for high impedance voltage line and low impedance (8 Ω) installations.
- Excellent response for any frequency range.
- Ideals for outdoor installations and other areas suffering adverse weather conditions.

MSH 30/BT

WHS 45 S

Technical data	MSH 30/BT
Type:	Two way sound projector.
Elements:	6” woofer + 2.5” TWT.
Power taps (100 V line):	50 W (200 Ω) / 25 W (400 Ω) / 12.5 W (800 Ω) / 9 W (1k1 Ω) / 4.5 W (2k2 Ω) / 3.5 W (2k8 Ω).
Power taps (70 V line):	25 W (197 Ω) / 12.5 W (392 Ω) / 6.5 W (753 Ω) / 4.5 W (1k2 Ω) / 2.7 W (1k8 Ω) / 1.7 W (2k8 Ω).
Low impedance output:	50 W at 8 Ω.
Frequency response:	90 Hz-20 kHz.
Sensitivity (1W/1m):	99 dB.
Max. SPL.:	115 dB.
IP range:	IP 56.
RAL colour code:	7035.
Material (housing):	ABS plastic.
Dimensions (WxHxD):	363 x 253 x 310 mm.
Weight:	3.9 kg.



Technical data	WHS 45 S
Type:	Full range sound projector.
Elements:	5” woofer.
Power taps (100 V line):	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω) / 3.8 W (2k6 Ω).
Power taps (70 V line):	30 W (163 Ω) / 15 W (326 Ω) / 7.5 W (653 Ω) / 3.8 W (1k3 Ω) / 1.9 W (2k5 Ω).
Power taps (low impedance):	30 W at 8 Ω.
Frequency response:	100 Hz - 10 kHz.
Sensitivity (1W/1m):	90 dB.
Max. SPL.:	105 dB.
IP range:	IP 56.
RAL colour code:	7035.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Dimensions (WxHxD):	366 x 230 x 272 mm.
Weight:	3 kg.

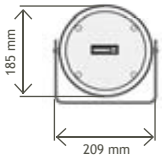
CS 6 A
Sound projector

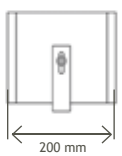
CS 6 A is a cylindrical sound projector made of strong ABS plastic. It features a 120 mm dynamic cone woofer (full range) which provides an excellent response for any frequency. It is suitable for several type of installation thanks to its transformer (50, 70, 100 V Line).

Features
- Sound projector with a cylindrical shape and dynamic cone woofer.
- Designed for large areas with important background (train stations, airports, etc.).
- Suitable for high impedance (50/70/100 V) voltage line installations with transformer.
- Made of strong ABS plastic to improve resistance.

CS 6 A

Technical data	CS 6 A
Type:	Full range sound projector.
Elements:	5” woofer.
Power taps (100 V line):	6 W (1k6 Ω) / 3 W (3k3 Ω) / 1.5 W (6k3 Ω).
Power taps (70 V line):	6 W (816 Ω).
Power taps (50 V line):	6 W (416 Ω).
Power taps (low impedance):	6 W at 8 Ω.
Frequency response:	150 Hz - 15 kHz.
Sensitivity (1W/1m):	98 dB.
Max. SPL.:	105 dB.
IP range:	IP 46.
RAL colour code:	1002.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Dimensions (Ø x D):	185 x 200 mm.
Weight:	1.4 kg.





CS 30 A
Sound projector

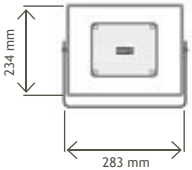
This sound projector with a square shape is designed for large areas with important background noise (train stations, airports, etc.). It is made of strong ABS plastic to protect it from hits.

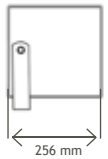
It features a 120 mm dynamic cone woofer which provides an excellent acoustic response for any frequency. It is suitable for several type of installation (50, 70, 100 V Line and 8 Ω low impedance connection).

Features
- Sound projector with a square shape and dynamic cone woofer.
- Designed for large areas with important background (train stations, airports, etc.).
- Suitable for high impedance (50/70/100 V) voltage line installations.
- Made of strong ABS plastic to improve resistance.

CS 30 A

Technical data	CS 30 A
Type:	Full range sound projector.
Elements:	5” woofer.
Power taps (100 V line):	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω).
Power taps (70 V line):	30 W (163 Ω).
Power taps (50 V line):	30 W (83 Ω).
Power taps (low impedance):	30 W at 8 Ω.
Frequency response:	125 Hz - 15 kHz.
Sensitivity (1W/1m):	101 dB.
Max. SPL.:	115 dB.
IP range:	IP 46.
RAL colour code:	1002.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Dimensions (WxHxD):	283 x 234 x 256 mm.
Weight:	3.7 kg.





These sound projectors made of ABS plastic and aluminium are designed to precisely control the orientation of the sound.

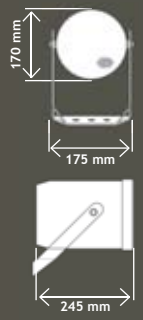
They all feature an axial cone woofer (full range), a wide frequency range and a SPL system which improves sound orientation. Their transformer makes them suitable for several type of installation. They are particularly adequate for areas with important background noise like train stations and airports.

Features

- Sound projector with a cylindrical shape.
- Axial cone woofer (full range).
- SPL system, impoving sound orientation.
- Suitable for high impedance (with passive crossover 100 V) voltage line installations.
- Recommended for areas with important background music (e.g. train stations, airports).

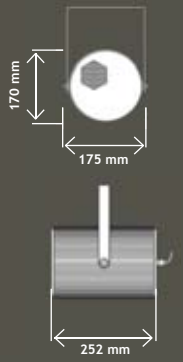
CS 323 T

Sound projector



CS 310 T

Sound projector

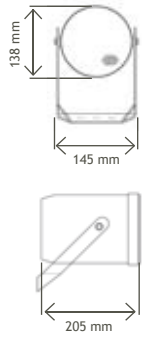


Technical data	CS 323 T	CS 310 T
Type:	Full range sound projector.	Full range sound projector.
Elements:	6.5” woofer.	6.5” woofer.
Power taps (100 V line):	20 W (500 Ω) / 10 W (1k Ω) / 5 W (2k Ω).	20 W (500 Ω) / 10 W (1k Ω) / 5 W (2k Ω).
(*) Power taps (70 V line):	10 W (490 Ω) / 5 W (980 Ω) / 2.5 W (1k96 Ω).	10 W (490 Ω) / 5 W (980 Ω) / 2.5 W (1k96 Ω).
Power taps (50 V line):	110 Hz - 15 kHz.	110 Hz - 15 kHz.
Sensitivity (1W/1m):	92 dB.	92 dB.
Max. SPL:	108 dB.	108 dB.
IP range:	IP 55.	IP 54.
RAL colour code:	9016.	9016.
Material (housing):	ABS plastic.	Aluminium.
Material (grille):	Aluminium.	Steel.
Dimensions:	Ø 170 x 245 mm.	Ø 170 x 252 mm.
Weight:	1.6 kg.	2.8 kg.

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

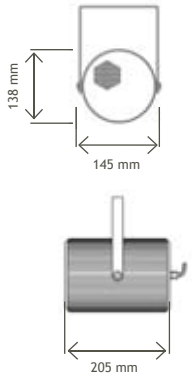
CS 306 T

Sound projector



CS 303 T

Sound projector



Technical data	CS 306 T	CS 303 T
Type:	Full range sound projector.	Full range sound projector.
Elements:	5” woofer.	5” woofer.
Power taps (100 V line):	10 W (1 kΩ) / 5 W (2 kΩ) / 2.5 W (4 kΩ).	10 W (1 kΩ) / 5 W (2 kΩ) / 2.5 W (4 kΩ).
(*) Power taps (70 V line):	5 W (980 Ω) / 2.5 W (1k96 Ω) / 1.25 W (3k9 Ω).	5 W (980 Ω) / 2.5 W (1k96 Ω) / 1.25 W (3k9 Ω).
Frequency response:	130 Hz - 15 kHz.	130 Hz - 15 kHz.
Sensitivity (1W/1m):	91 dB.	91 dB.
Max. SPL:	101 dB.	101 dB.
IP range:	IP 55.	IP 54.
RAL colour code:	9016.	9016.
Material (housing):	ABS plastic.	Aluminium.
Material (grille):	Aluminium.	Steel.
Dimensions:	Ø 138 x 205 mm.	Ø 138 x 205 mm.
Weight:	1.6 kg.	2.2 kg.

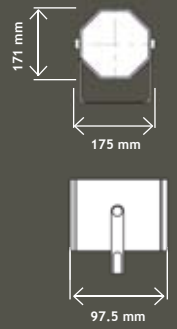
(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

CSP 530 D / CSP 515

Sound projectors

These two sound projectors made of aluminium stand out for their octagonal shape. Designed for outdoor installations, they feature metal grille, steel mounting handle and cable which resists to adverse weather conditions.

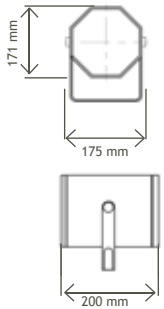
Both models have a full range woofer and respectively feature 15 W and 30 W power with an excellent response for any frequency. Their transformer makes them suitable for several type of installation (50, 70, 100 V Line). CSP 530 D differentiates itself from the other model because it is bidirectional: this increases possibilities of use.



CSP 515

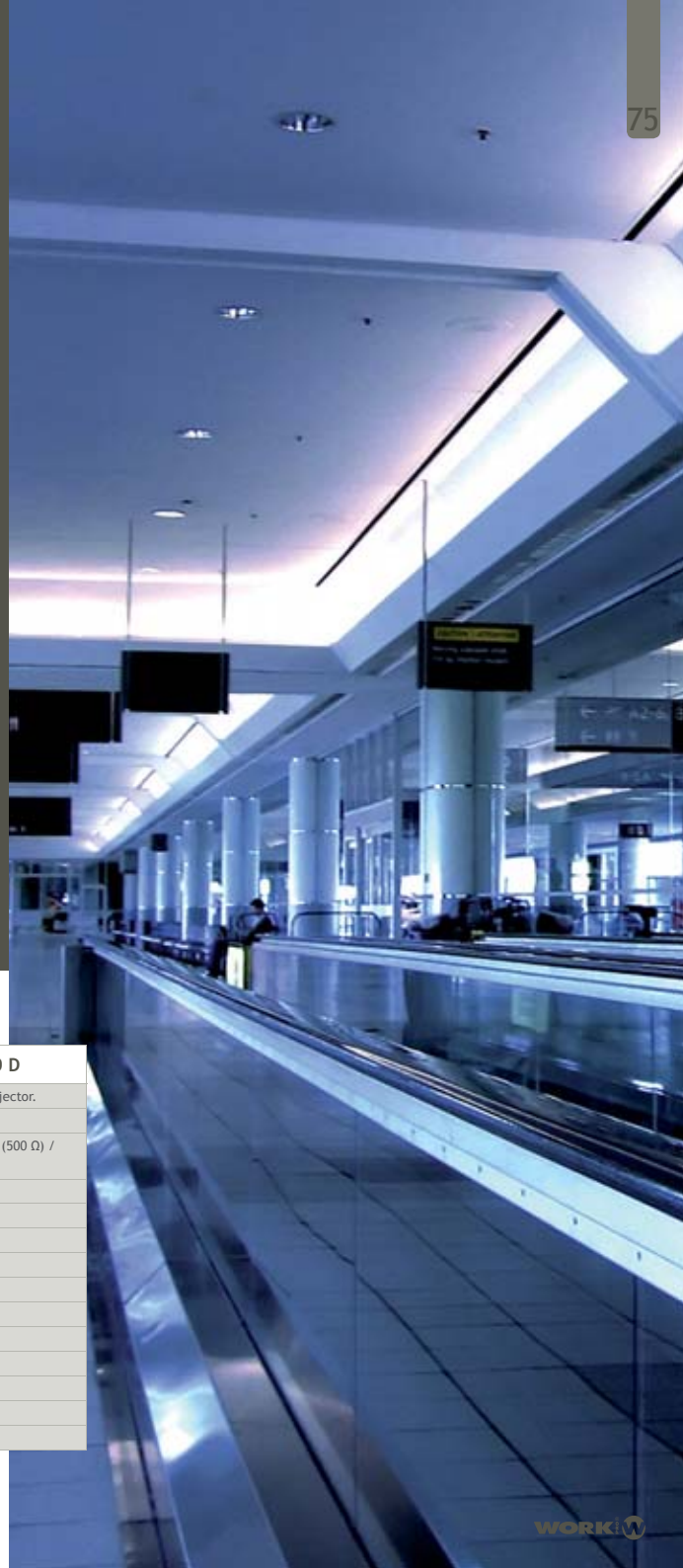
Features

- Sound projectors with octogonal shape.
- Full range woofer with an excellent response for any frequency range.
- Suitable for high impedance (50/70/100 V) voltage line installations.
- Two versions: unidirectional (CSP 515) and bidirectional (CSP 530 D).
- Suitable for outdoor applications thanks to their high IP range (66).



CSP 530 D

Technical data	CSP 515	CSP 530 D
Type:	Full range sound projector.	Full range sound projector.
Elements:	1 x 5.5" woofer.	2 x 5.5" woofer.
Power taps (100 V line):	15 W (666 Ω) / 7.5 W (1k3 Ω) / 3.75 W (2k6 Ω).	30 W (333 Ω) / 20 W (500 Ω) / 10 W (1k Ω).
Power taps (70 V line):	15 W (326 Ω).	30 W (163 Ω).
Power taps (50 V line):	15 W (166 Ω).	30 W (166 Ω).
Frequency response:	130 Hz -20 kHz.	140 Hz -20 kHz.
Sensitivity (1W/1m):	90 dB.	88 dB.
Max. SPL.:	101 dB.	102 dB.
IP range:	IP 66.	IP 66.
RAL colour code:	9016.	9016.
Material (housing):	Aluminium.	Aluminium.
Material (grille):	Steel.	Steel.
Dimensions:	Ø 175 x 97.5 mm.	Ø 175 x 200 mm.
Weight:	2.6 kg.	3.5 kg.



PH/BT series

Horn speakers

These horn speakers are specially designed for outdoor installation and alarm systems. They are made of ABS plastic and feature stainless steel handles and a IP range of 56.

Each model has its own power, from 15 to 30 W, which ensures sound diffusion in any medium-size installations. Thanks to their transformer and power tap selector, they are suitable for high impedance (70/100 V) voltage line and low impedance (8 Ω) installations.

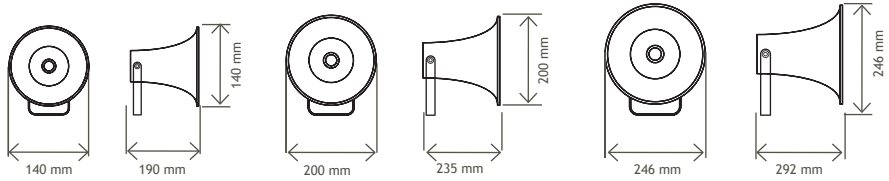
Features

- Horn speakers made of strong ABS plastic.
- Highly resistant speakers, with steel handles and 56 IP range.
- Suitable for high impedance (70/100 V) voltage line and low impedance (8 Ω) installations.
- Included power tap selector.
- Up to 30 W power, depending on model.
- Suitable for outdoor applications.

PH 10/BT

PH 15/BT

PH 30/BT



Technical data	PH 10/BT	PH 15/BT	PH 30/BT
Type:	Horn speaker.	Horn speaker.	Horn speaker.
Power taps (100 V line):	10 W (1 kΩ) / 5 W (2 kΩ) / 2.5 W (4 kΩ) / 1.25 W (8 kΩ).	15 W (666 Ω) / 7.5 W (1k3 Ω) / 3.75 W (2k6 Ω) / 1.9 W (5k9 Ω).	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω) / 3.75 W (2k6 Ω).
Power taps (70 V line):	10 W (490 Ω) / 5 W (980 Ω) / 2.5 W (1k9 Ω) / 1.25 W (3k9 Ω) /0.6 W (8k1 Ω).	15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3Ω) / 1.9 W (2k5 Ω) / 1 W (4k9 Ω).	30 W (163 Ω) / 15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3Ω) / 1.9 W (2k5 Ω).
Power taps (low impedance):	10 W at 8 Ω.	15 W at 8 Ω.	30 W at 8 Ω.
Frequency response:	400 Hz - 10 kHz.	300 Hz - 8 kHz.	350 Hz - 8 kHz.
Sensitivity (1W/1m):	87 dB.	91 dB.	87 dB.
Max. SPL.:	97 dB.	102 dB.	101 dB.
IP range:	IP 56.	IP 56.	IP 56.
RAL colour code:	9016.	9016.	9016.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Dimensions:	Ø 140 x 190 mm.	Ø 200 x 235 mm.	Ø 246 x 292 mm.
Weight:	1.3 kg.	1.9 kg.	2.3 kg.

SC/AH series

Horn speakers

The following horn speakers feature a transformer which makes them suitable for high impedance (25, 70 and 100 V) voltage line installations. Their power taps (from 10 to 30 W) ensure an efficient sound diffusion in medium-size installations.

They are made of ABS plastic and have a high IP range (66). They also feature stainless steel handles, being all adequate for alarm systems in outdoor applications.

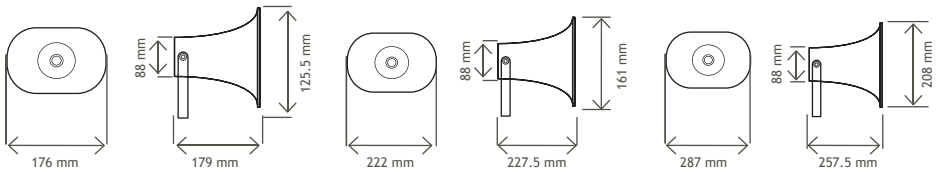
Features

- Horn speakers made of strong ABS plastic.
- Highly resistant speakers, with 66 IP range.
- Suitable for high impedance (100 V) voltage line installations.
- Up to 30 W power, depending on model.
- Suitable for medium-size outdoor applications.

SC 10 AH

SC 15 AH

SC 30 AH



Technical data	SC 10 AH	SC 15 AH	SC 30 AH
Type:	Horn speaker.	Horn speaker.	Horn speaker.
Power taps (100 V line):	10 W (1 kΩ) / 5 W (2 kΩ) / 3 W (3k3 Ω) / 1 W (10 kΩ).	15 W (666 Ω) /10 W (1 kΩ) / 5 W (2 kΩ) / 3 W (3k3 Ω) / 1 W (10 kΩ).	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω) / 3 W (3k3 Ω) / 1 W (10 kΩ).
Power taps (70 V line):	5 W (980 Ω) / 2.5 W (1k9 Ω) / 1.5 W (3k2 Ω) / 0.5 W (9k8 Ω).	7.5 W (653 Ω) / 2.5 W (1k9 Ω) / 1.5 W (3k2 Ω) / 0.5 W (9k8 Ω).	15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3 Ω) / 1.5 W (3k2 Ω) / 0.5 W (9k8 Ω).
Power taps (25 V line):	10 W (250 Ω).	15 W (166 Ω).	30 W (83 Ω).
Frequency response:	315 Hz - 12k5 Hz.	280 Hz - 12k5 Hz.	250 Hz - 16 kHz.
Sensitivity (1W/1m):	93 dB.	94 dB.	93 dB.
Max. SPL.:	103 dB.	105 dB.	107 dB.
IP range:	IP 66.	IP 66.	IP 66.
RAL colour code:	1002.	1002.	1002.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Dimensions:	Ø 176 x 179 mm.	Ø 222 x 227.5 mm.	Ø 287 x 257.5 mm.
Weight:	1 kg.	1.6 kg.	2 kg.

TU 15 / TU 25 / TU 40

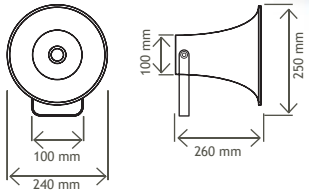
Horn speakers

These horn speakers are designed for music and speech reproduction. They have a circular shape and they are specially recommended for large areas which require a high sound pressure level.

They are suitable for low impedance installation (8 Ω). Additionaly they are molded in aluminium and they have a high IP range which protects them from adverse weather conditions.

Features

- Horn speakers made of aluminium.
- Highly resistant speakers, with 66 IP range.
- Designed for music and speech reproduction.
- Suitable for low impedance (8 Ω) installations.
- Suitable for large areas.



Technical data	TU 15	TU 25	TU 1640
Type:	Horn speaker.	Horn speaker.	Horn speaker.
Power handling (low impedance):	15 W at 8 Ω.	25 W at 8 Ω.	40 W at 8 Ω.
Frequency response:	300 Hz - 8 kHz.	300 Hz - 8 kHz.	250 Hz - 5 kHz.
Sensitivity (1W/1m):		93 dB.	
Max. SPL.:	100 dB.	107 dB.	112 dB.
IP range:	IP 66.	IP 66.	IP 66.
RAL colour code:	7037.	7037.	7037.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Dimensions:	Ø 205 x 210 mm.	Ø 240 x 260 mm.	Ø 410 x 380 mm.
Weight:	0.85 kg.	1.1 kg.	2.1 kg.

TH 15 / SC 35 A / SC 1540

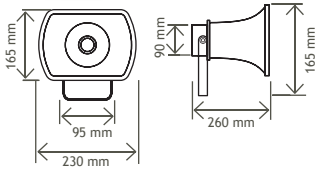
Horn speakers

These horn speakers designed for music and speech reproduction have a square shape and they are specially recommended for large areas which require a high sound pressure level.

They are suitable for low impedance installation (8 Ω). Additionaly they are molded in aluminium and have a high IP range in order which protects them from adverse weather conditions.

Features

- Horn speaker made of aluminium.
- Highly resistant speaker, with 66 IP range.
- Designed for music and speech reproduction.
- Suitable for low impedance (8 Ω) installations.
- Suitable for large areas.



Technical data	TH 25	SC 35 A	SC 1540
Type:	Horn speaker.	Horn speaker.	Horn speaker.
Low impedance output:	25 W at 8 Ω.	35 W at 8 Ω.	40 W at 8 Ω.
Frequency response:	300 Hz - 9 kHz.	300 Hz - 10 kHz.	250 Hz - 7 kHz.
Sensitivity (1W/1m):		93 dB.	
Max. SPL.:	100 dB.	107 dB.	105 dB.
IP range:	IP 66.	IP 66.	IP 66.
RAL colour code:	7037.	7037.	7037.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Dimensions:	Ø 210 x 200 mm.	Ø 230 x 260 mm.	Ø 350 x 340 mm.
Weight:	2 kg.	2 kg.	2 kg.

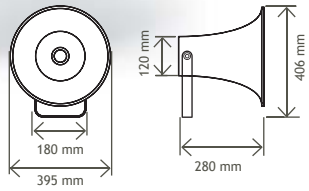
TH 14 / TH 16 / TH 20

Horn diffusors

These horn diffusors provide a large dispersion of sound. They are suitable with the compression motors of the TU series. They are made of alumium and include a steel mounting handle to fix it on walls and ceilings.

Features

- Horn diffusors made of aluminium.
- Suitable with the compression motors of the TU series.
- Highly resistant diffusor, with 66 IP range.
- Easy to connect to compression motors.



Technical data	TH 14	TH 16	TH 20
Type:	14” horn diffusor.	16” horn diffusor.	20” horn diffusor.
IP range:	IP 66.	IP 66.	IP 66.
RAL colour code:	7037.	7037.	7037.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Dimensions:	Ø 365 x 277 mm.	Ø 406 x 280 mm.	Ø 516 x 390 mm.
Weight:	1.5 kg.	1.5 kg.	1.5 kg.

TU ML series

Compression motors

These three compression motors made of aluminium are suitable for 100 V voltage line installations.

Each model has its own output power (from 35 to 80 W). They are suitable for the TH 16 diffusor, being very easy to connect.

Features

- Compression motors for 100 V line installations.
- Up to 80 W power, depending on model.
- Suitable for the TH 16 horn diffusor.
- Easy to connect to the diffusor.

TU 80 ML

TU 60 ML

TU 35 ML

Technical data	TU 35 ML	TU 60 ML	TU 80 ML
Type:	Compression motor.	Compression motor.	Compression motor.
Power (100 V line):	35 W (285 Ω) / 20 W (500 Ω) / 10 W (1 kΩ).	60 W (166 Ω) / 40 W (250 Ω) / 20 W (500 Ω).	80 W (125 Ω) / 50 W (200 Ω) / 35 W (285 Ω).
(*) Power (70 V Line):	17.5 W (280 Ω) / 10 W (490 Ω) / 5 W (980 Ω).	30 W (163 Ω) / 20 W (245 Ω) / 10 W (490 Ω).	40 W (122 Ω) / 25 W (196 Ω) / 17.5 W (280 Ω).
Frequency response:	200 Hz - 4 kHz.	200 Hz - 4.5 kHz.	200 Hz - 4.5 kHz.
Sensitivity (1W/1m):	96 dB.	96 dB.	96 dB.
Max. SPL.:	115 dB.	115 dB.	115 dB.
Material (housing):	Metal.	Metal.	Metal.
Dimensions:	110 x 160 mm.	110 x 160 mm.	110 x 160 mm.
Weight:	1.7 kg.	2.1 kg.	2.1 kg.

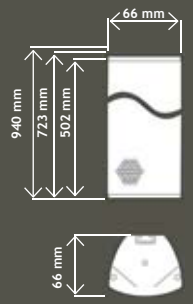
(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

CS series

Column speakers

The **CS series** includes three column speakers designed for audio diffusion in churches, train stations and almost any other places where a clear understanding of announcement is essential, even with a large audio dispersion.

The three models can be installed in any 100 V Line installations. They all include a power tap selector to adjust output to installation requirements. Made of aluminium, they feature an elevate IP range (IP 66) which increases possibilities, as they are also suitable for outdoor applications.



Features

- Column speakers with a large audio diffusion.
- Designed for a clear understanding of announcement.
- Suitable for high impedance (100 V) voltage line installations.
- Specially adequate for churches, train stations and colleges.
- Elevate IP range (66) for outdoor use.

Input connection.

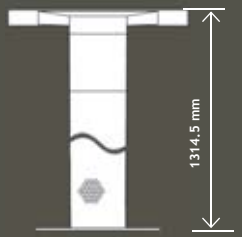
Technical data	CS 206	CS 210	CS 214
Type:	Column speaker.	Column speaker.	Column speaker.
Elements:	6 x 2" woofer (full range) + 1" TWT.	10 x 2" woofer (full range) + 1" TWT.	14 x 2" woofer (full range) + 1" TWT.
Power taps (100 V line):	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω).	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω).	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω).
(*) Power taps (70 V Line):	15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3 Ω).	15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3 Ω).	15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3 Ω).
Frequency response:	210 Hz - 20 kHz.	200 Hz - 20 kHz.	180 Hz - 20 kHz.
Sensitivity (1W/1m):	96 dB.	97 dB.	99 dB.
Max. SPL.:	100 dB.	101 dB.	103 dB.
Dispersion (H/V):	165°/55°.	165°/50°.	165°/75°.
IP range:	IP 66.	IP 66.	IP 66.
RAL colour code:	9010.	9010.	9010.
Material (housing):	Aluminium.	Aluminium.	Aluminium.
Material (grille):	Aluminium.	Aluminium.	Aluminium.
Dimensions (WxHxD):	66 x 502 x 66 mm.	66 x 723 x 66 mm.	66 x 940 x 66 mm.
Weight:	2.6 kg.	3.3 kg.	4 kg.

(*) The power taps indicated in the transformer are calculated for 100 V Line connection. In case of 70 V Line connection, each power tap will correspond to a half value.

CSV 640

Column speaker

2 Mic/Line inputs and 1 Aux input with their own volume and tone controls.



Base dimensions: 580 x 420 mm.

Stable base.

CSV 640 is a self-power column designed for conferences, meetings and teaching.

It features 4 full range speakers and delivers up to 40 W power. It features 2 Mic/1Line + 1 Aux (with 4 sensitivity positions and tone/ control).
One of the Mic inputs is located close to the flex lamp (microphone included). A Rec output is available, as well as a direct connection to external speakers. An optional wireless VHF microphone is available with the column.

Features

- Self-powered column designed for conferences, meetings and teaching.
- Flex lamp and microphone included.
- Four position selector with individual volume control.

Technical data	CSV 640
Type:	Column speaker.
Elements:	4 x 6" woofer + 2 x TWT.
Amplifier power:	40 W at 8 Ω.
Frequency response:	100 Hz - 16 kHz.
Input sensitivity / impedance:	
Mic 1:	- 50 dB / 680 Ω.
Mic 2:	- 55 dB / 600 Ω.
Line:	- 20 dB / 50 kΩ.
Aux 1:	- 20 dB / 10 kΩ.
Aux 2:	- 15 dB / 30 kΩ.
Aux 3:	- 10 dB / 50 kΩ.
Aux 4:	- 3 dB / 80 kΩ.
Max. SPL.:	110 dB.
THD:	0.5%.
S/N ratio:	45 dB.
RAL colour code:	9016.
Material (housing):	Metal.
Material (grille):	Metal.
Main supply:	AC 220 V / DC12 V.
Dimensions:	1314.5 x 580 x 420 mm.
Weight:	19 kg.